

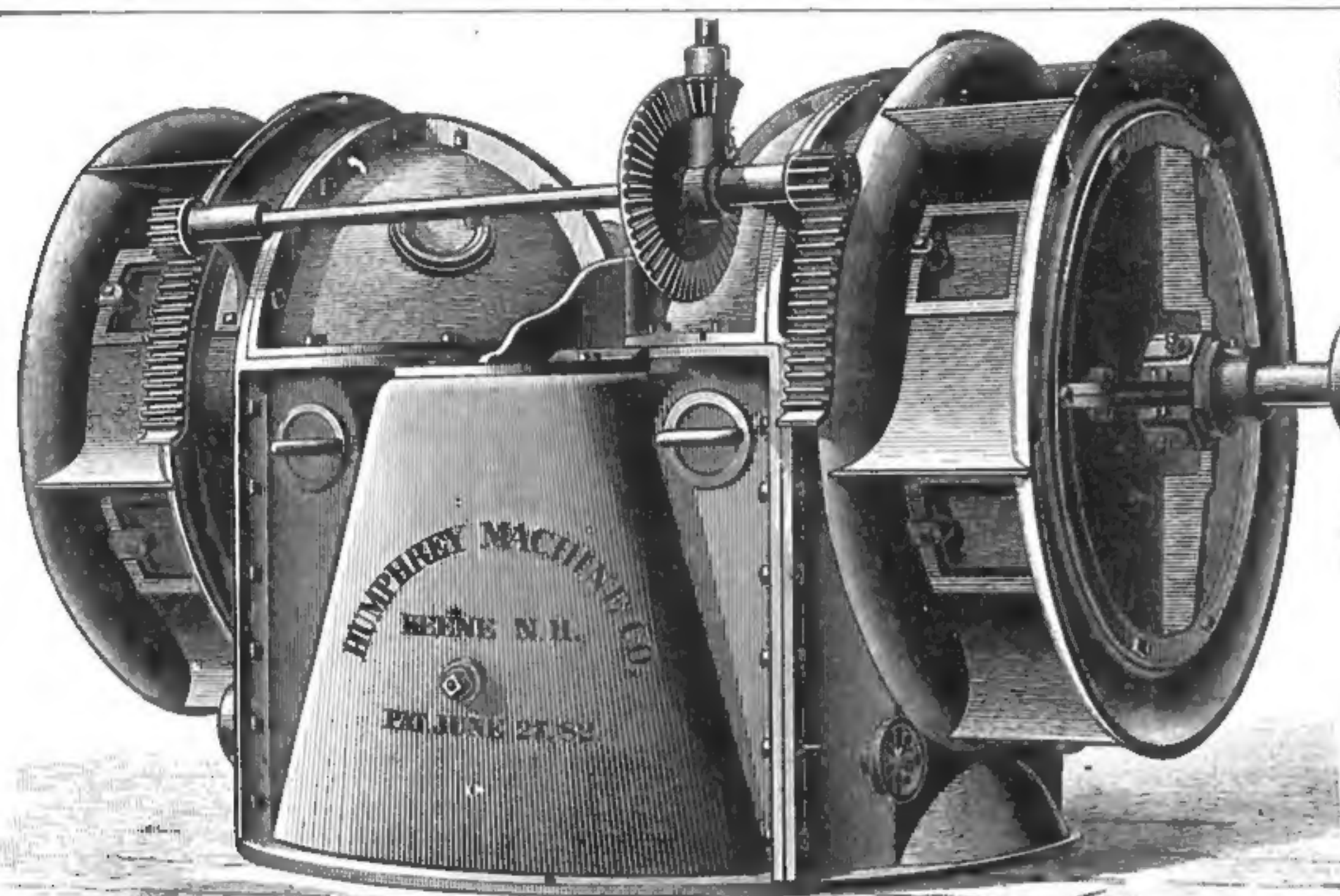
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXIII. No. 11.

BUFFALO, N. Y., NOVEMBER 10 1890

\$1.50 PER YEAR.



THE X-L-G-R OR
CIRCUMSHOT

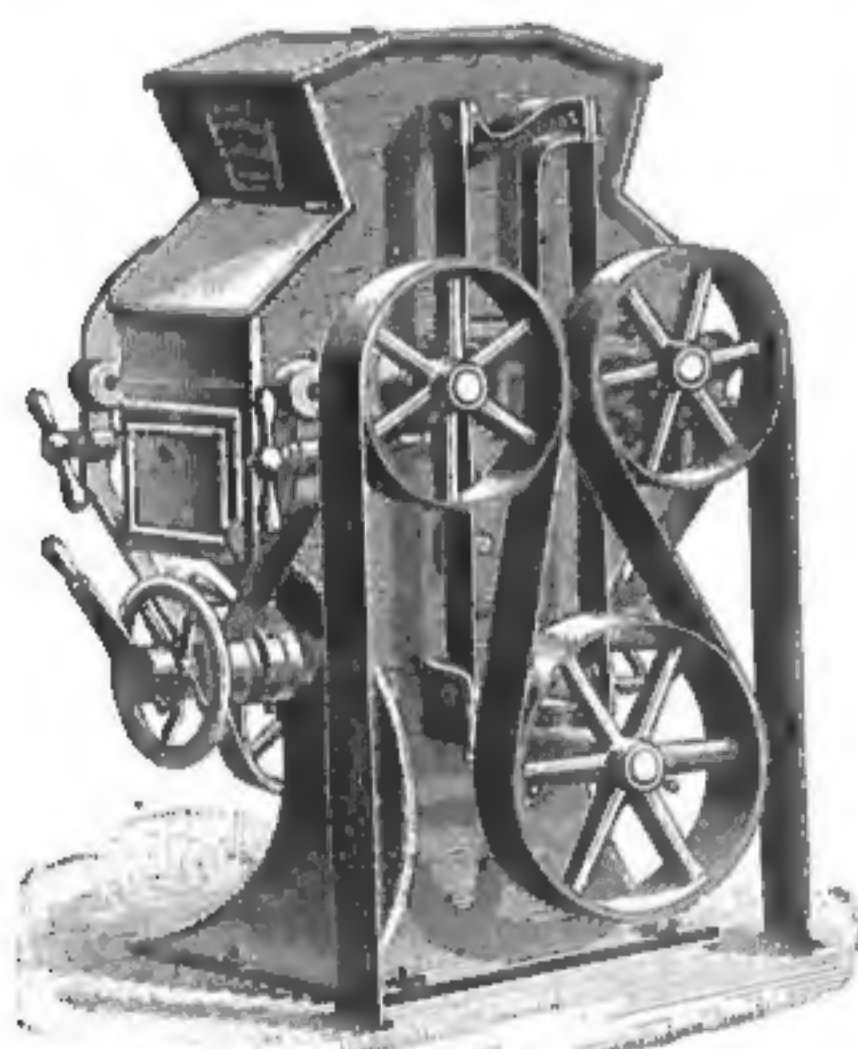
Water Wheel

On Horizontal Shaft. Saves cost, annoyance and loss of power incident to use of gears. Affords more available power from water applied at full or part gate than any other. The cheapest, best and most desirable Water Wheel yet produced.

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FLOUR MILLS. CORN MILLS. HOMINY MILLS.

THE BEST MILL THAT HAS EVER BEEN BUILT IN GREENE COUNTY, PA.

THE J. B. ALLFREE CO.

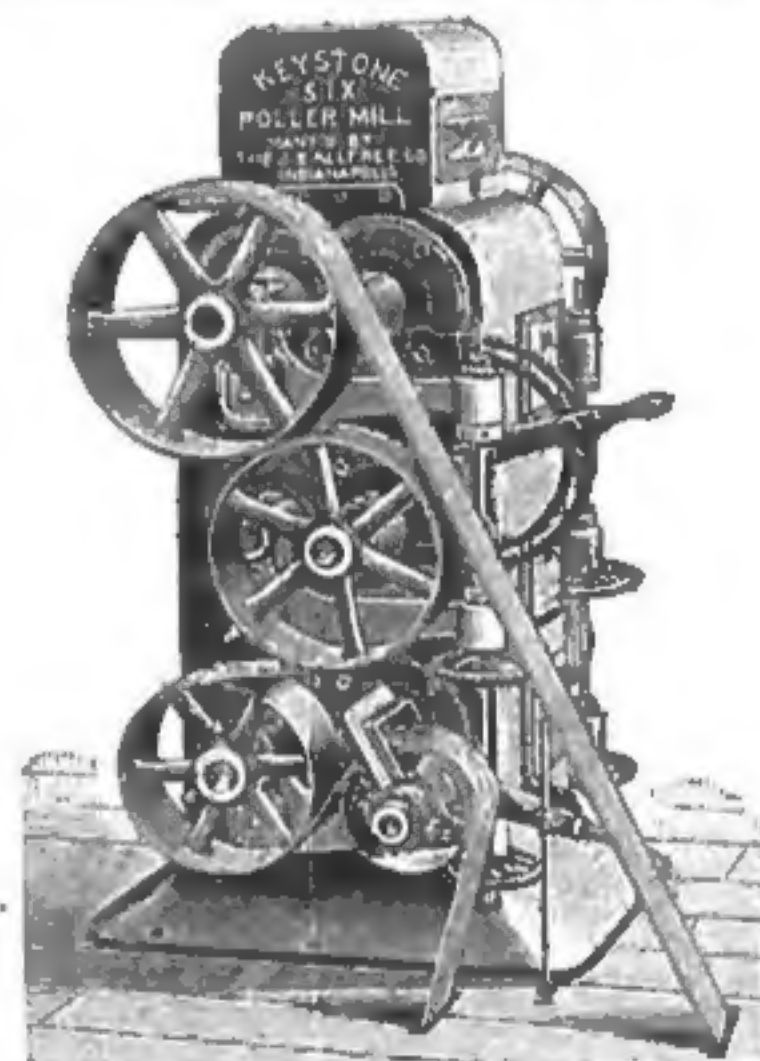
GENTLEMEN: After running my 25-bbl. mill over one month I feel it my duty, and in justice to you, to state that I am more than pleased with the mill you built for me; it started like a clock from the word "go." Before making my contract I made careful inspection of the different systems and machinery in the best mills, and now feel that I have made no mistake in awarding you the contract. I am well satisfied that your guarantees have been more than fulfilled as regards percentages, yield and capacity. I undoubtedly have the best mill that has ever been built in Greene County, Pa. which, together with the superior quality of wheat, enables us to turn out grades of flour that are unequalled, and reports which I have received from expert bakers fully substantiate this statement. My clean-up is equal to any 25-bbl. mill in the State. I will say that "The J. B. Allfree Rolls and Flour Dressers" can not be beaten in the world for light running and ease of access to all their parts. I would advise any miller building a new mill or remodeling an old one, to place their contract with The J. B. Allfree Co. Thanking you for the prompt and efficient manner in which you built my mill, and wishing you continued success, I remain,

WHITELEY, PA., AUG. 27, 1890.

ANDREW LANTZ.

SEND FOR CIRCULAR OF OUR 6-ROLLER CORN AND FEED MILL.

THE BEST IN THE WORLD TO-DAY.



"Keystone" 6-Roller Corn & Feed Mill.

ADDRESS THE J. B. ALLFREE CO., 76 to 86 Shelby Street, INDIANAPOLIS, IND.

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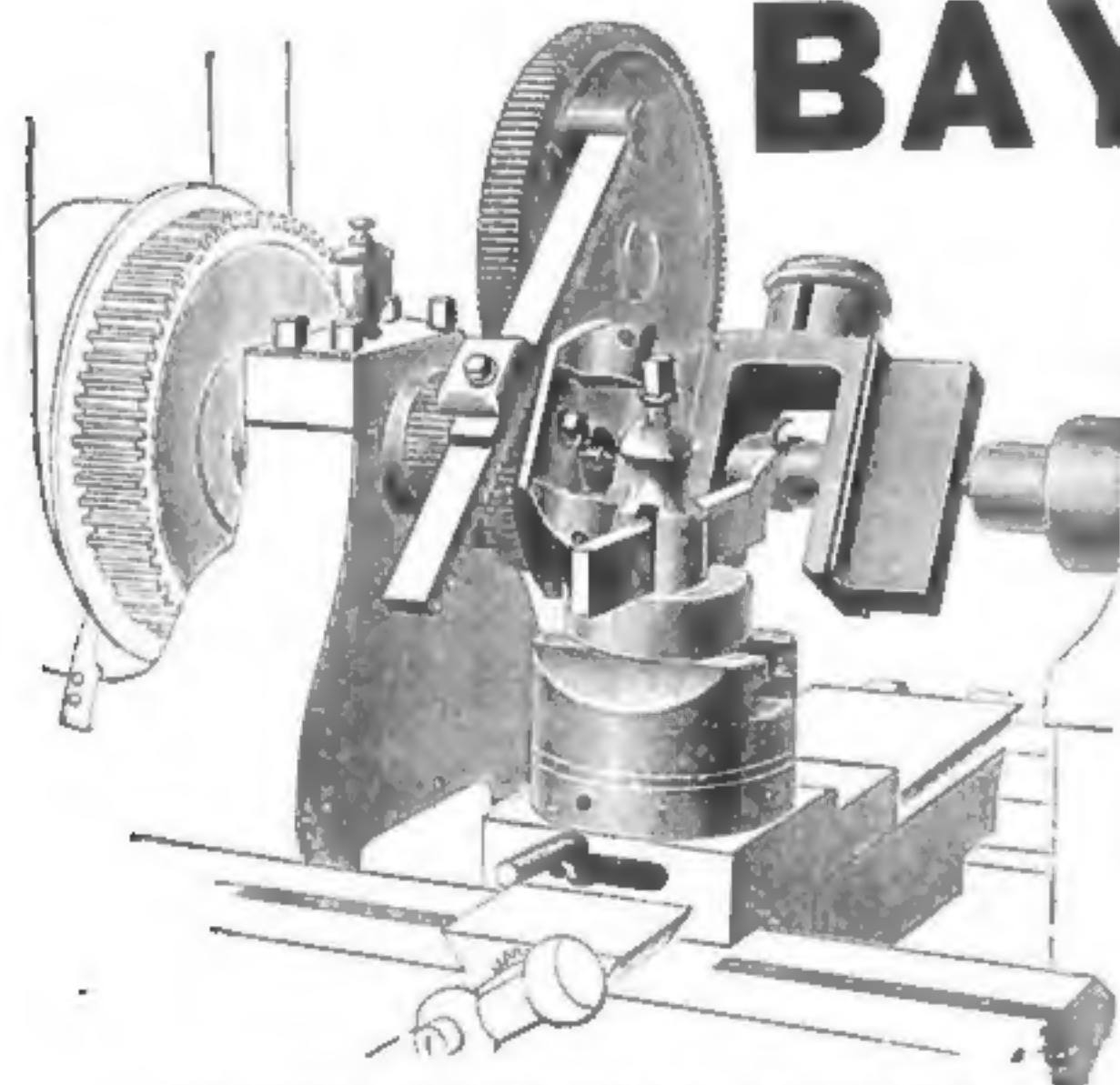
Manufacturers of

Engines, Boilers,

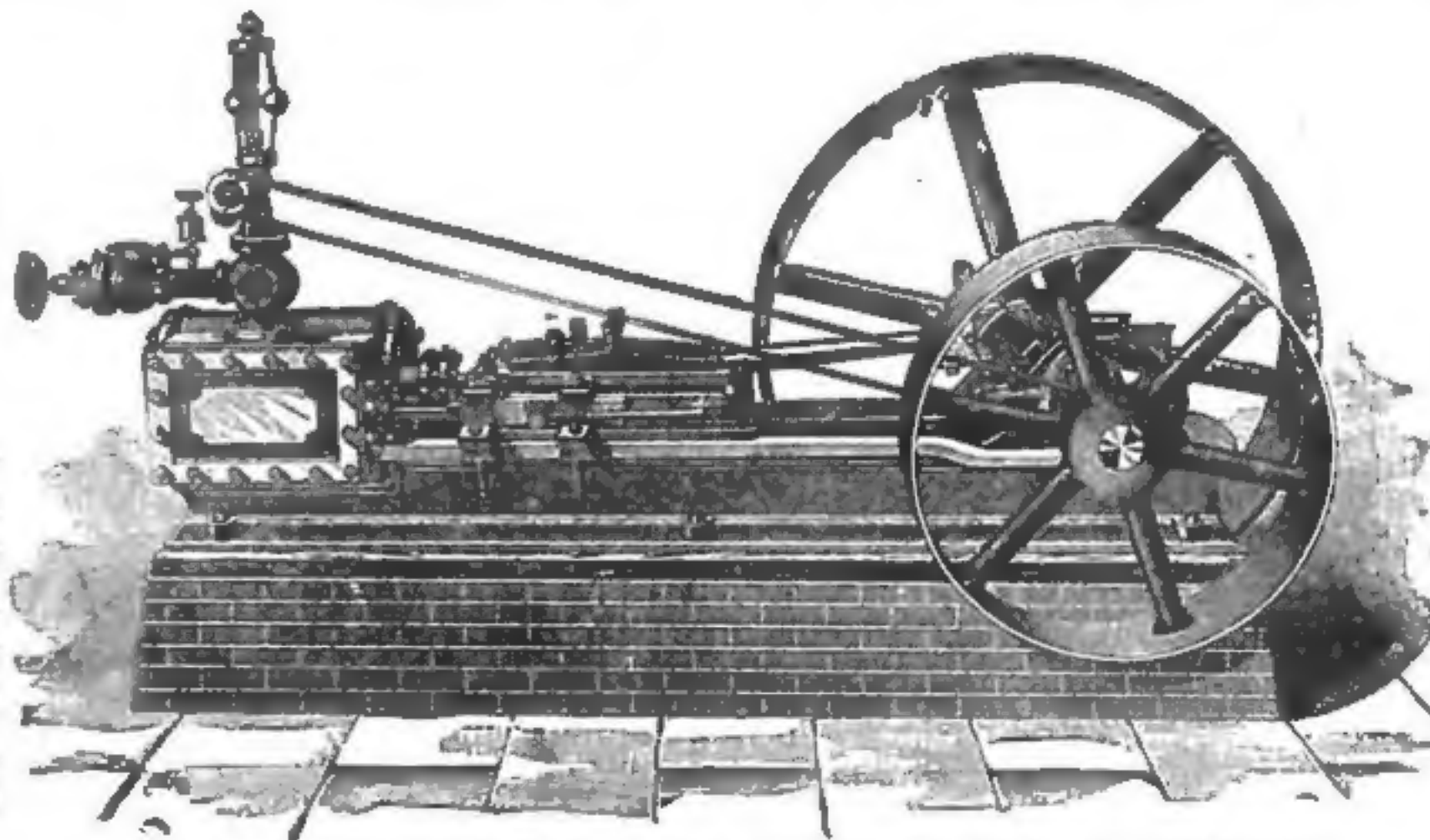
—AND—

HOISTING MACHINES.

Also the Patent Cross-Head Machine and Acme Cube Pipe Tongs. We make either Center or Side Crank Engines, on same bed. Make engines from 5 to 250 Horse-Power. Have over 3,500 Engines and Boilers and over 1,000 Hoisting Machines in use, and all giving good satisfaction. Send for Catalogues and Prices.



PATENT CROSS-HEAD MACHINE.



IMPROVED DETACHABLE CENTER-CRANK ENGINE.

Noble & Hall, Box 462, Erie, Pa.

OFFICE OF CASE MANUFACTURING COMP'Y COLUMBUS, OHIO.

The Case Roller Mills. Over 14,000 Pairs in Use.

PLEASE READ OUR DESCRIPTION OF THEM, EVERY STATEMENT OF WHICH IS ABSOLUTELY TRUE.

PLEASE READ WHAT MILL OWNERS SAY ABOUT THEM.



The accompanying cut is a correct illustration of our latest improved Four Roller Mill. For fine work, great durability, simplicity, and general excellence, they stand "head and shoulders" above all others.

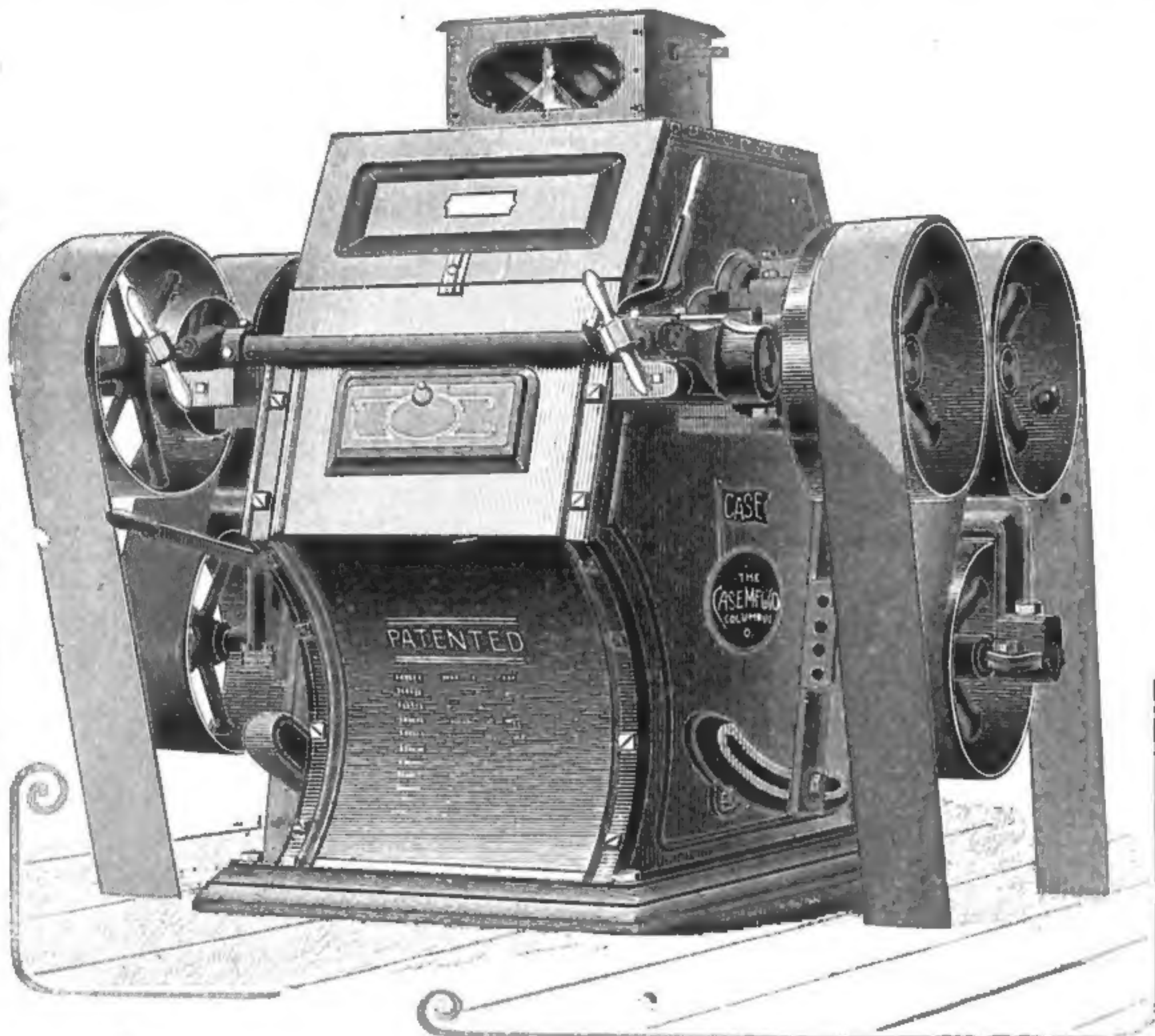
The frame is of iron with a heavy iron base.

The wood-work in top is of select cherry and black walnut, carefully shellacked and varnished.

The handles of adjusting screws and levers are finely nickel plated.

The joints are tight and dustless.

The adjustments easy, simple and perfect.



The roll bearings are wide and finely babbitted.

The belt drive is positive—no little short belts to slip.

The door for examining stock is a great convenience.

The arrangement for leveling rolls, simple and accurate.

The rolls can be thrown apart their entire length by one movement of the lever, and brought back again to original position, requiring no re-setting or experimenting.

Each machine is provided with our AUTOMATIC VIBRATING FEED, which requires no attention, and never fails to spread the feed the entire length of the rolls.



LISTEN! MICHIGAN MILLERS TALKING NOW.

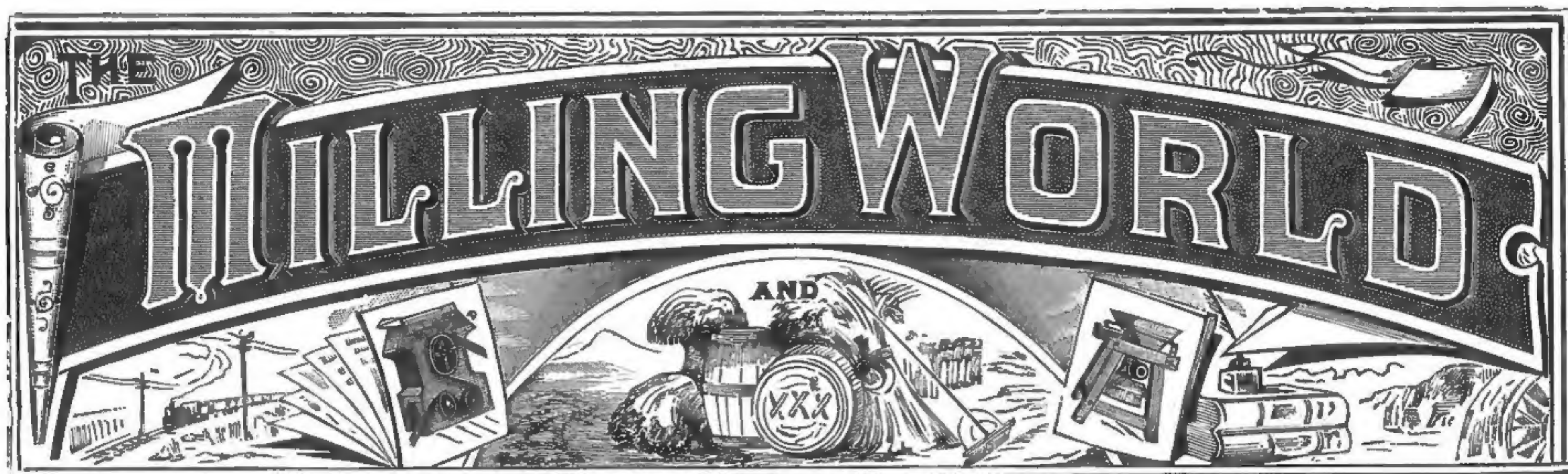
CHARLOTTE, MICH., AUG. 5, 1890.

MESSRS. CASE MFG. CO., COLUMBUS, O.

Gentlemen: The mill is running fine. We are enjoying quite a fine little trade. Already have put over twenty tons of flour on the market here since we started the 7th of July; and it is giving elegant satisfaction. Every one who has seen our outfit pronounces it A 1, and the Case Automatic Feed can't be beat. In fact the Rolls are models of perfection. We are making a close finish and placing our goods alongside of the long system mills, carrying off the cake. We are highly pleased with the millwright work, and find your Messrs. McKenie and Shough congenial gentlemen to do business with.

Very truly yours,

PERKINS & MOON.



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WASHINGTON is a young State, but its products are large. A dispatch from Spokane Falls on November 3, concerning the fair just opened, said: "Many things shown at the exposition here would be regarded as freaks of nature if produced anywhere but in the State of Washington. Among the exhibits were 101 bushels of wheat from one acre, 27 pounds of potatoes from a single hill, 7 pounds of splendid grapes in a single bunch, a single tree 9 feet and 4 inches through, a single cabbage weighing 53 pounds and a single block of coal weighing $4\frac{1}{2}$ tons."

DURING September there were 45,478 immigrants received in the United States, against 38,517 in September last year. During the first three months of the current fiscal year the number was 120,562, against 102,779 last year. During the first nine months of 1890 the number was 381,399, against 339,080 in the same months in 1889. These figures do not include immigrants from Mexico and Canada. The number coming in continually from Canada is considerable, and during the past nine months the movement has been quite large from Canada. The Canadian incomers are generally very desirable citizens. A good many of the Europeans are very undesirable in every way. They all eat, and they all add to the demand made upon the millers for flour.

CANADIAN emigration and immigration agents, who have gone or are going to Europe, loaded with exaggeration in favor of Manitoba and against Minnesota, North Dakota and South Dakota, should not fail to have with them the figures of the wheat crops of those three States in this year of so-called "total failure," "disaster" and "desolation by drouth." The reports on northwestern wheat crops place the yield in Minnesota at 44,086,000 bushels, against 45,456,000 bushels reported last year by the agricultural department, and for the two Dakotas 37,885,000 bushels, against 41,652,000 bushels, making the total 81,791,000, against 87,108,000 bushels reported for 1889. These figures would make a strong commentary on the Manitoban misrepresentations of the three States mentioned, while the fact that Manitoba has a wheat crop ranging from 12,000,000 to 14,000,000 bushels, mostly of inferior quality through a wet harvest, would be quite as strong a commentary on the Manitoban misrepresentations of Manitoba. To paint Manitoba as a paradise and the United States as a desert may dupe a few European peasants, but if they are stupid enough to remain in Manitoba after discovering the deception, they will not make good Canadians. Tell the truth, Messrs. Manitoban Emigration Agents.

MOST assuredly the Millers' National Association "does not fill the bill." It has never filled the bill. THE MILLING WORLD and other independent milling journals have known the fact and related it for years. Now even the "ex-organ" of the organization is forced to acknowledge the failure. It was impossible for it to succeed. Essentially a narrow, selfish spring-wheat exporters' club, its influence could be only small. Having no care for and no membership among the 20,000 flour-makers of the United States, boasting its independence of and contempt for the "small miller," paying no attention whatever to the technical work of the miller,

forever attempting the impossible, and always masquerading under a grotesquely inapplicable name, failure was the only thing it could be expected to achieve. Failure it has achieved, in measure running over, in degree immeasurable. To-day it has no more influence in shaping the course of the milling industry in the United States than has the cabinet of the king of Zululand. If some of the prominent and progressive millers of the United States would study such organizations as the American Iron and Steel Association, and would apply the information gained by that study to the formation of a millers' association on similar broad lines, a really powerful "national" body might be formed. The National Millers' Association of France offers another model. The German national body offers a third. In order to utilize these models, it would be necessary to abolish altogether the present narrow close corporation of big fish that masquerades as the Millers' National Association of the United States, and to interest in the movement millers of all schools, of all sizes, and of all sections. Once started on a broad basis, the movement would go on to success. Can it be started?

THE summer is past and the harvest is ended, and the wheat-crop guessers are still at work, getting out new sets of estimates daily to befog and bewilder the public. The result indicated in "official reports" in Europe are somewhat surprising. The Russian official report scales down the wheat yield from 225,000,000 to 196,000,000 bushels, a decrease of 29,000,000 bushels. Curiously enough, the French semi-official estimate makes the French crop about 30,000,000 bushels larger than either French millers, bakers, traders or milling journals are willing to accept. Notwithstanding the confessed shortages in most countries and the manifest exaggerations of yields in others, it is thought by some statisticians that the wheat crop of the world for 1890 is nearly 100,000,000 bushels larger than was the crop of 1889. With the shortages in India, Russia, Germany, Canada, Australia and Argentine Republic confessed, and with Austria-Hungary alone boasting an important surplus, it is not easy to understand how there can be a larger crop this year than last. Another important consideration is the low general quality this year. Spring wheat in the United States and Canada is, according to samples received and the statements of farmers and dealers, "way off" in quality. In Russia the deterioration is very marked. India always shows a nasty crop. Even the large crop of Hungary is not up to the usual high grade of that country. France and Germany have low-grade crops. So much low-grade wheat means the use of more grain to each barrel of flour, and it follows that, even if the present crop were equal in quantity to that of last year, which is not satisfactorily proved, the poor quality would still create a positive shortage. The most conservative view, based on information concerning the crop in every wheat-growing country, calls for higher values during the coming winter. Speculators may occasionally boom or break prices for a day or a week, but the philosophy of the situation implies great firmness in values, with an increase in January and February, should the Southern Hemisphere crops then turn out small or only average.

The DAWSON ROLL WORKS CO.

FOUNDERS & MACHINISTS,

—MANUFACTURERS OF THE—

Dawson Roller Mills

—AND FURNISHERS OF—

CHILLED IRON ROLLS

WITH DAWSON PATENT CORRUGATION.

ALL STYLES OF FLOUR MILL ROLLS RE-GROUND AND
RE-CORRUGATED WITH ANY FORM OF CORRUGATION.

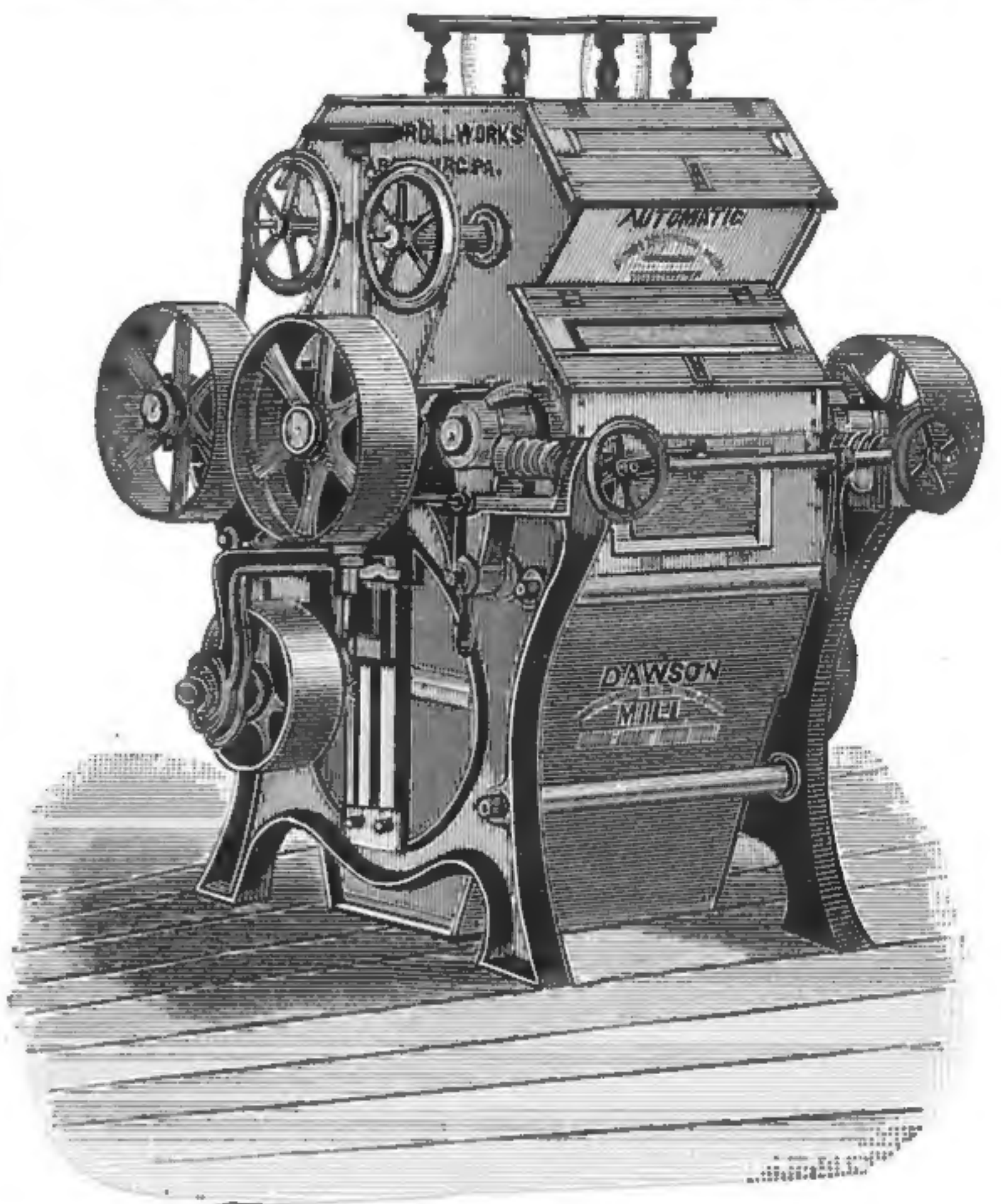
We have had large and extended experience in grinding and corrugating chilled rolls for milling, and have one of the largest and most improved plants in the country for this work, which enables us to meet the most exacting requirements of the trade promptly.

ORDERS AND CORRESPONDENCE SOLICITED.

DAWSON ROLL WORKS CO.

South and Short Streets,

HARRISBURG, PA.



BEST STEEL SAFETY MADE FOR
\$35

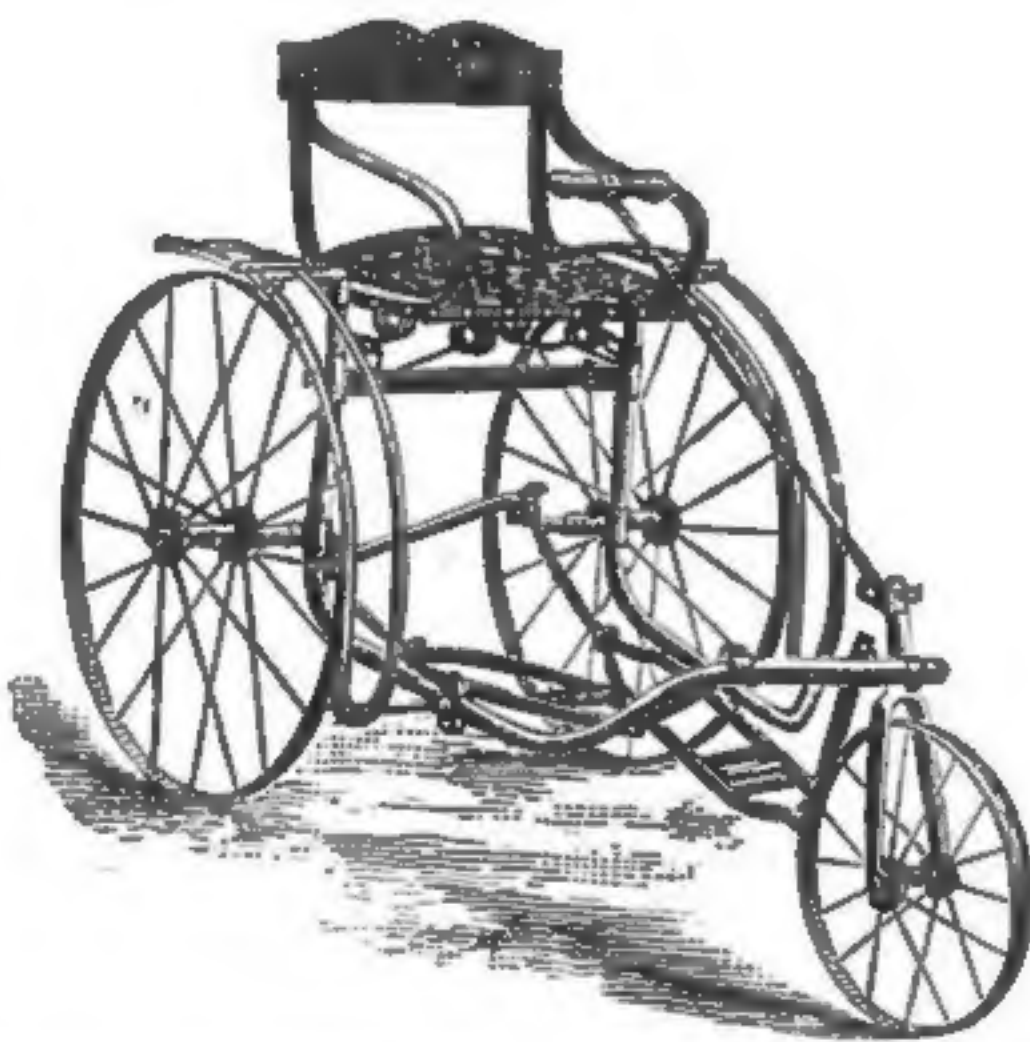
Easiest LADIES' Tricycle Known

Our Tricycles the Only Machine ever Recommended by Physicians for Ladies and Girls of a Delicate Constitution.

THE BUFFALO TRICYCLE CO.

Manufacturers of Ladies' and Girls' Tricycles, Ladies' and Boys' Safety Bicycles, Etc., Etc.

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LOCKPORT, NEW YORK.

Remodeled last year. Refurnished entirely with new and elegant furniture. Fitted with all modern improvements, including Electric Lights, Steam Heat, Call Bells, Elevator, Etc.

FREE BUS TO ALL DAY TRAINS.

W. C. COMSTOCK, PROP.



WHEN BUYING A BOILER FEEDER
BUY THE BEST.

Satisfaction ➤

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AMERICAN INJECTOR CO., NO. 175 Larned St., West, **DETROIT, MICH.**



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McFAUL & NOLAN, - - - PROPRIETORS.
THOMAS McFAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application.

Advertisements of Mills for sale or to rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD,
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 8 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

WANTED, TO RENT.

A good Custom Mill, in a good grain section. Steam or water power. Address, MILLER, P. O. Box 170, Pocomoke City, Worcester County, Md. 252

FOR SALE AT A BARGAIN

I have a half interest in a Short System Roller Mill which I will sell at a bargain. Don't write unless you mean business. Address, GEO. FOSTER, Wakeman, O. 47

FOR SALE.

One No 1 Howes, Babcock & Co, Silver Creek, N Y, Lengthened Scourer and Smutter, nearly new. Address, CHAS. SCHOEPLIN & BRO, Gardenville, N. Y. 46

FOR RENT.

Clinton Mills, at B'ack Rock, Buffa o, for rent on reasonable terms, recently repaired and put in good order. App'y to CHAS. DANIELS, over 311 Main Street, Buffalo, N. Y. 66f

FOR SALE.

Rare chance, Grist, Saw, Planing Mill, Lumber and Coal Yard, doing good business. Growing village; 15 miles from Washington. Owner wishes to retire. Small capital needed. Terms easy. A. FREEMAN, Vienna, Va. 37

FOR SALE

Whole or part of a 125-barrel Flouring Mill, built entirely new from ground up. Equipped with latest machinery. Side track at mill door. Located in South Michigan. Big local and exchange trade. For further particulars address B. B., care of THE MILLING WORLD. 37

FOR SALE

Flour and saw-mill with or without farm of 38 acres. Four buhr mill, with machinery and building in most excellent condition. Buildings on farm good. Good run of custom. Can run by water 9 months, also have steam power. Terms easy. On Big Indian Creek, 1/4-mile from Crandall, on Air Line. Mrs. C. KRACKMAN, Crandall, Ind. 36

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
One 20-Inch Portable Mill.
One 18-Inch Double Gear Portable Mill.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

FOR SALE AT A GREAT BARGAIN

The Reist Roller Mill, at Williamsville, 4 1/2 miles from Buffalo city line. Eighteen acres of land, with dwelling houses, twenty-two feet fall stone dam, Leffel Turbine water wheels, water the year round, steam power to assist in extreme dry seasons. Nine set 9x18 Stevens Rolls, two run of stone, three George T. Smith purifiers, grain-cleaners, scalping and bolting capacity for 80 to 100 barrels per twenty-four hours, etc., etc. Title perfect, bought at Sheriff's sale. Mill was mortgaged for \$18,000; will sell for \$5,500, without regard to loss, as I am no miller, but engaged in other business. The quick buyer will secure a great bargain. Address, WILLIS B. MUSSER, Lancaster, Pa., or my attorneys, BAKER, SCHWARTZ & DAKE, Esqs., Hayen Building, Buffalo, N. Y. 912

FLOUR MILL WANTED.

Flouring-mill wanted at Evart, Osceola Co., Mich. Good wheat region, large territory. Correspondence solicited. GEO. W. MINCHIN, Evart, Osceola Co., Mich. 69

THE Minneapolis "Yahoo," being an exporters' and speculators' journal, very naturally takes the free-trade side in economic discussion. Is there an exporting or importing journal in the United States that commends the reformed tariff?

OUR esteemed monthly cotemporaries will be greatly interested in the announcement that a new milling journal, a monthly, is about to make its appearance. Preparations are about completed, and the new journal will soon leap into the arena and begin to struggle with those already there. The new journal will probably be backed by three or four milling machinery houses. We welcome the prospective newcomer. The more, the merrier.

IT is rather early in the season to begin to bull the wheat crops of 1891, yet here is a specimen of the reports sent out from Kansas City, Missouri, at the close of October: "Farmers and grain-growers report that the Hessian fly has made an early attack on early sown wheat, and the indications are that the September wheat is doomed. Reports of the most damage come from Ottawa County, Kas., Fayette, Cass and Jackson counties, Missouri. It is believed that the damage is general, and that the fall wheat will be destroyed by the enemy." These bulls are certainly early in the field, at least fully as early as the Hessian fly.

EDITOR Cawker has fallen into the comical habit of talking about "alleged milling journals" that has characterized every past, present and prospective failure in the line of milling journalism in the country. Certainly no one accuses Editor Cawker, even by implication, of publishing even an "alleged" milling journal, as his journal studiously refrains from even remotely hinting at subjects that interest practical flour-makers. Of course an "end-man" is a necessity, and Editor Cowker drops into the chair assigned to that useful, because mirth-provoking, individual as naturally as his journal drops out of the field through the natural process of gangrene and decay. As a failure, Editor Cawker is a howling success.

THAT agonized journal of New York, "The Daily Commercial Bulletin," the organ of the alien Jewish and British importers in the United States, is still tearing out its hair over the reformed tariff. It is daily pouring out a flood of vituperation on all things, men, ideas and interests American. It is so unhappy over the prospects of more home manufactures and less importations of European goods that it seems to be close to the verge of insanity. Why does not the editor move to Europe? He should not try to stay in a country where 63,000,000 citizens know better what they want than one foreigner, or a thousand foreigners, can tell them. These be troublous days for the alien importing leeches. Hurrah for the reformed tariff!

THE longest word in the Welsh language has, after a long period of oblivion, been once more exhumed. It is Llanfairpwllgwylllgertrobgllgerchwyrnbyllgogerbwllzanttwsiliogogock. This awful word of 70 letters and 22 syllables is the name of a village in Wales.—Exchange. It is quite a "long-system" cognomen, to be sure, but how does it size up alongside of "Mpwawolonembaroggarinomolanlanbumbonogorrorokokotomolarembapwapwaggonagollobarigoolokomemwabapwopwokomembaringwapwamwapwo"? This horrific onslaught on the alphabetical capacities is said to be the name of a "city" in Africa, consisting of less than a hundred huts, and ruled by a dusky king. The name is said to signify "Palace of Mpwa, Owner of 100 wives, 50 elephants and 200 slaves, and supreme King over Two Hills and the River Between." Evidently the "short" craze has not yet fallen on African linguistic systems with anything at all resembling the traditional "dull and sickening thud."

STRENGTH IN SINGLE-RIVETED JOINTS.

"The Locomotive."

In the course of some recent correspondence between this office and Mr. James E. Howard, of the Watertown Arsenal, some points concerning the shape of test pieces of boiler plate, and the distribution of strains in single-riveted joints, were discussed. Tests made at the Arsenal are executed upon strips 10 inches long and $1\frac{1}{2}$ inches wide, and of the thickness of the plate as rolled. Strips of these dimensions compare well with larger specimens, 5 or 8 inches wide, and 15 or 20 inches long. Substantially the same results are obtained, whether the specimens have enlarged ends or parallel sides. Inasmuch as strips of the dimensions given above (*i. e.* $10'' \times 1\frac{1}{2}''$) appear to allow unrestricted flow of the metal, so far as form is concerned, it seems fair to consider that they represent the true qualities of the material, and that the indications that they give are entitled to confidence in designing riveted joints or other built-up forms. The strength per unit of area, along the net section in a riveted joint, depends upon a number of conditions which vary considerably in different joints, so that the tensile strength of the net section in some joints largely exceeds that of the strip, and in others falls far below it. The conditions in perforated test specimens are in some respects quite similar to those existing in a joint; but there is enough difference to cause them, in many cases, to give results appreciably different from those obtained from the joints themselves. The simplest form in which a joint

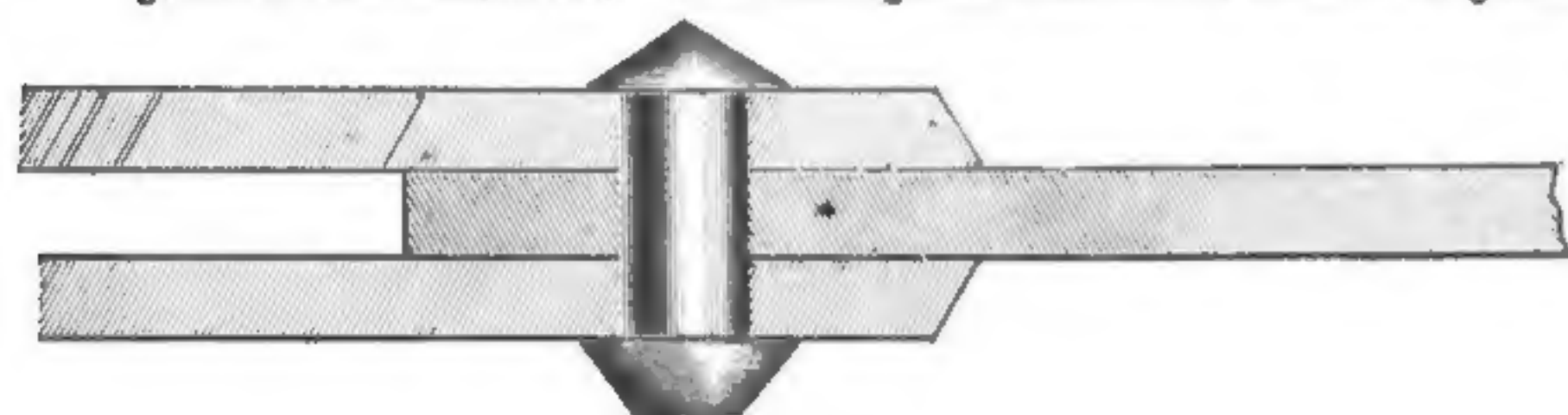


FIG. 1.

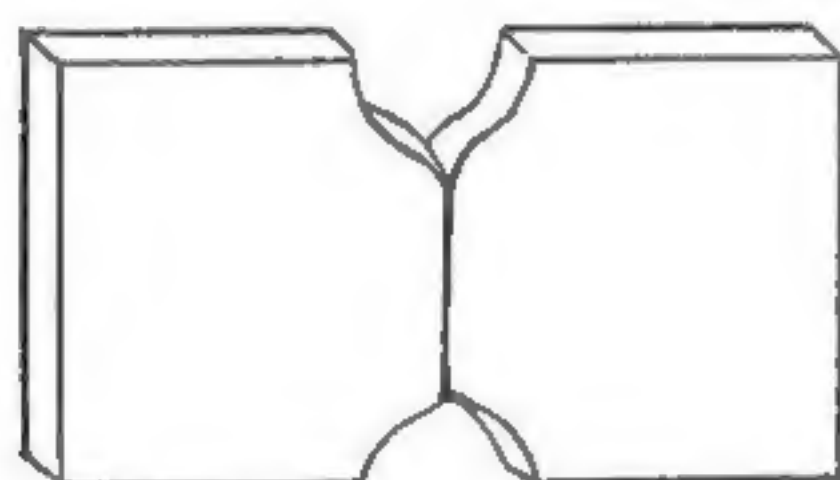


FIG. 5.

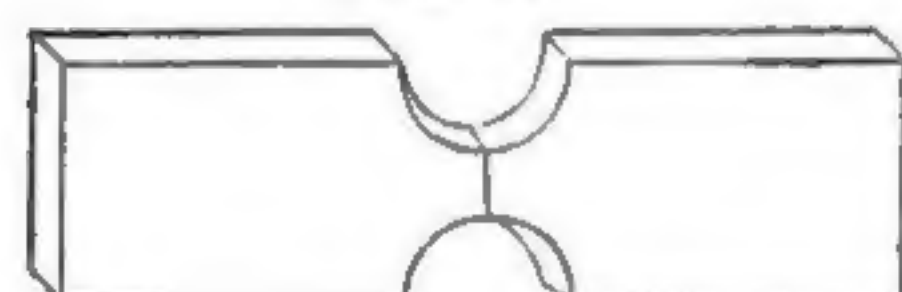


FIG. 5.

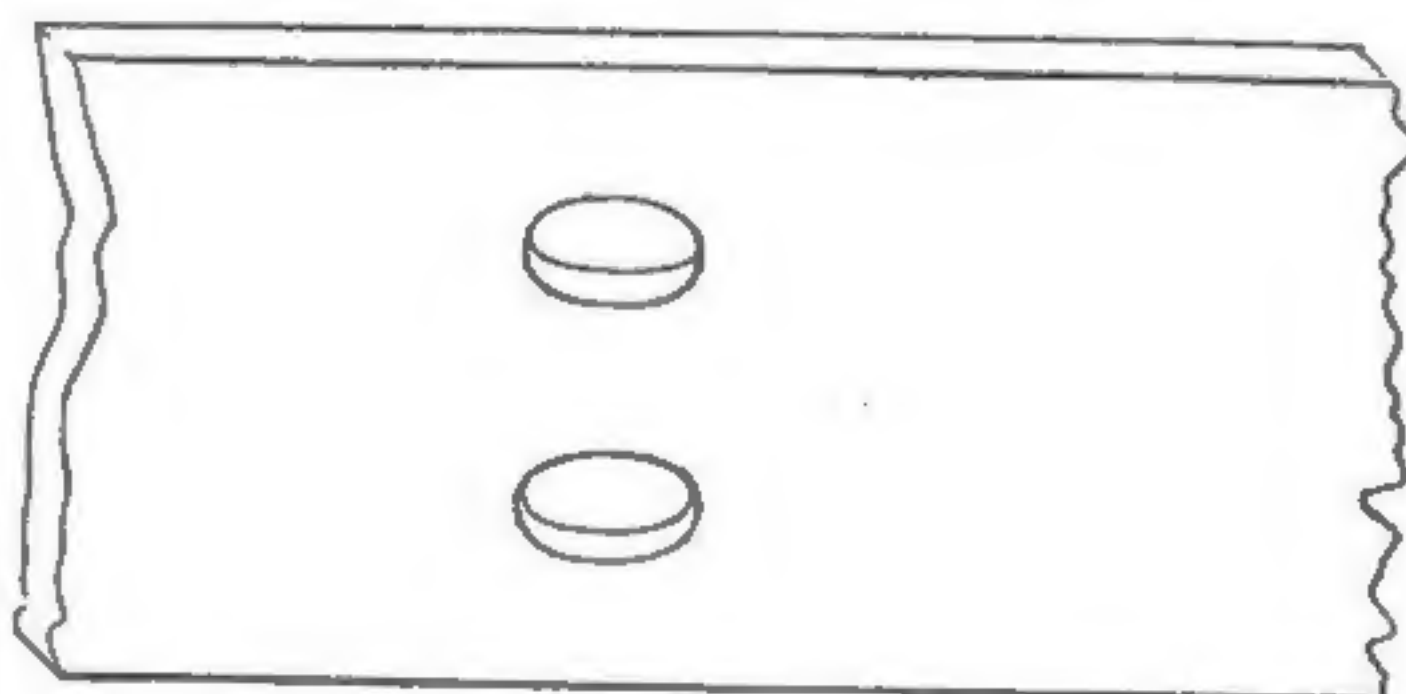


FIG. 4.

can be studied seems to be that represented in Fig. 1, where an annealed steel plate with drilled holes is riveted between two other plates, using one line of rivets. This corresponds to one-half of a single-riveted butt-joint, in which the covers are extended to a sufficient distance to be grasped in the jaws of the testing-machine. In this joint we eliminate many of the influences which tend to complicate the study of most other joints. The stresses radiate from the rivet holes, as in Fig. 2; the metal about the holes is left in its normal condition, on account of using drilled holes; and there is no bending of the plate as in a lap joint.

It will be seen that in pulling against the rivet holes we change the conditions from a perforated plate in which the stresses pass by the holes. To take an exaggerated case for illustration, suppose we had an excessively wide pitch of rivets as in Fig. 3, and a correspondingly perforated plate, as in Fig. 4. The concentration of stress at the rivet holes in the one case would tend to cause fracture in detail, the metal first separating at the sides of the holes and then tearing across; whereas, in the perforated plate, the percentage of metal removed being small, the stress on the net section would remain substantially uniform. If the rivet holes are punched, and the pitch very close, the cold-hardening of the punching might impart increased strength to the entire net section: while in a wider pitch, the punching would be an element of weakness by destroying a part of the ductility of the plate at the points where this ductility is most needed. These same considerations apply to wide

and narrow grooved specimens. See Figs. 5 and 6. The narrow one has the entire net section reinforced by the surrounding metal, while the wider specimen merely begins to tear out at the edges on account of the larger, and consequently more rigid section of metal on either side of the groove. Of course it will be understood that all these effects are exaggerated in the cuts. A riveted joint gives the best result when the net section is most reinforced by the solid section of the plate, or when the stress is substantially uniform over the net section extending from rivet hole to rivet hole.

When rivet holes are enlarged, the metal is stretched more at the sides of the holes than at the middle of the pitch, *i. e.* at $x \times$ in Fig. 7, and a metal, which in the tensile strip shows a large stretch near the maximum load with a small change in the load, seems particularly well adapted to distribute the stress from the rivet hole to the middle of the net section. In case this is an important point, it will be readily seen what a variety of conditions we may have in different grades of metal. The foregoing are some of the considerations which make a simple joint appear complicated when it is examined closely. There are numerous other considerations of a similar nature, one of which is the

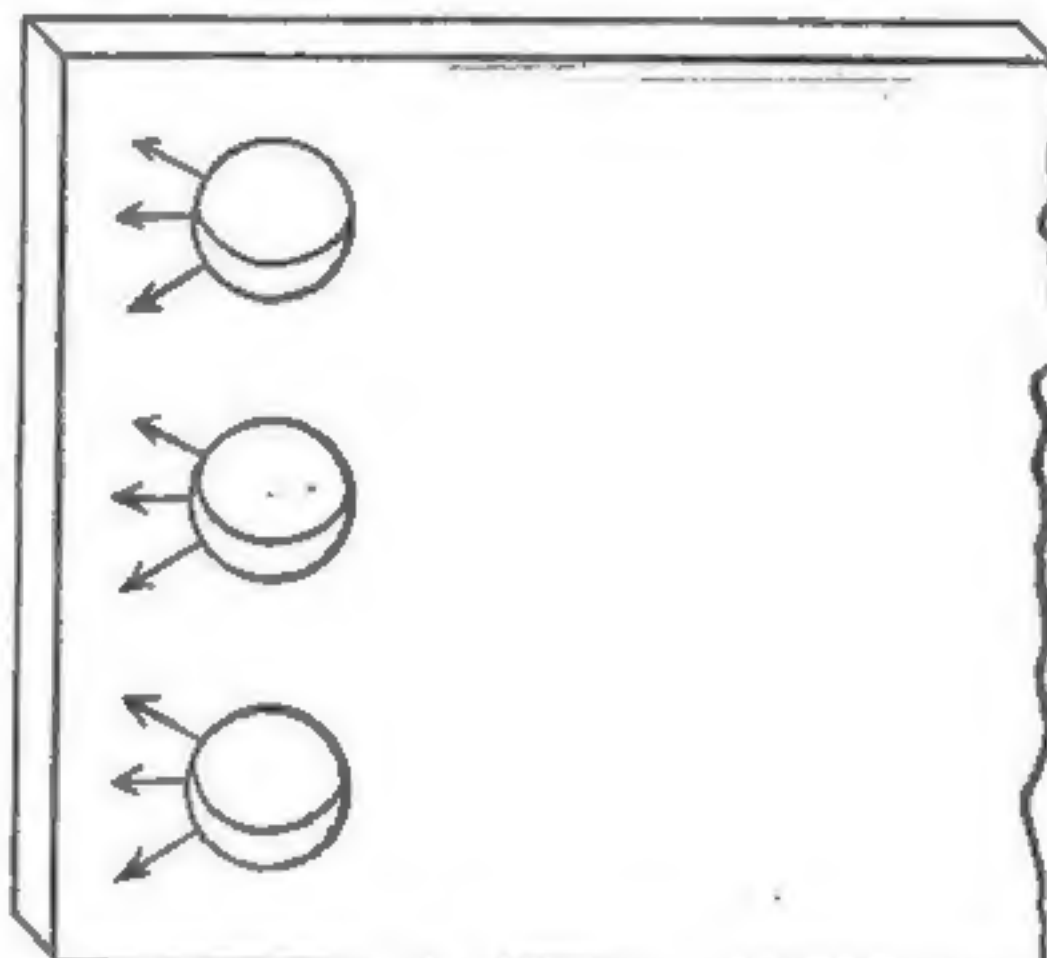


FIG. 2.

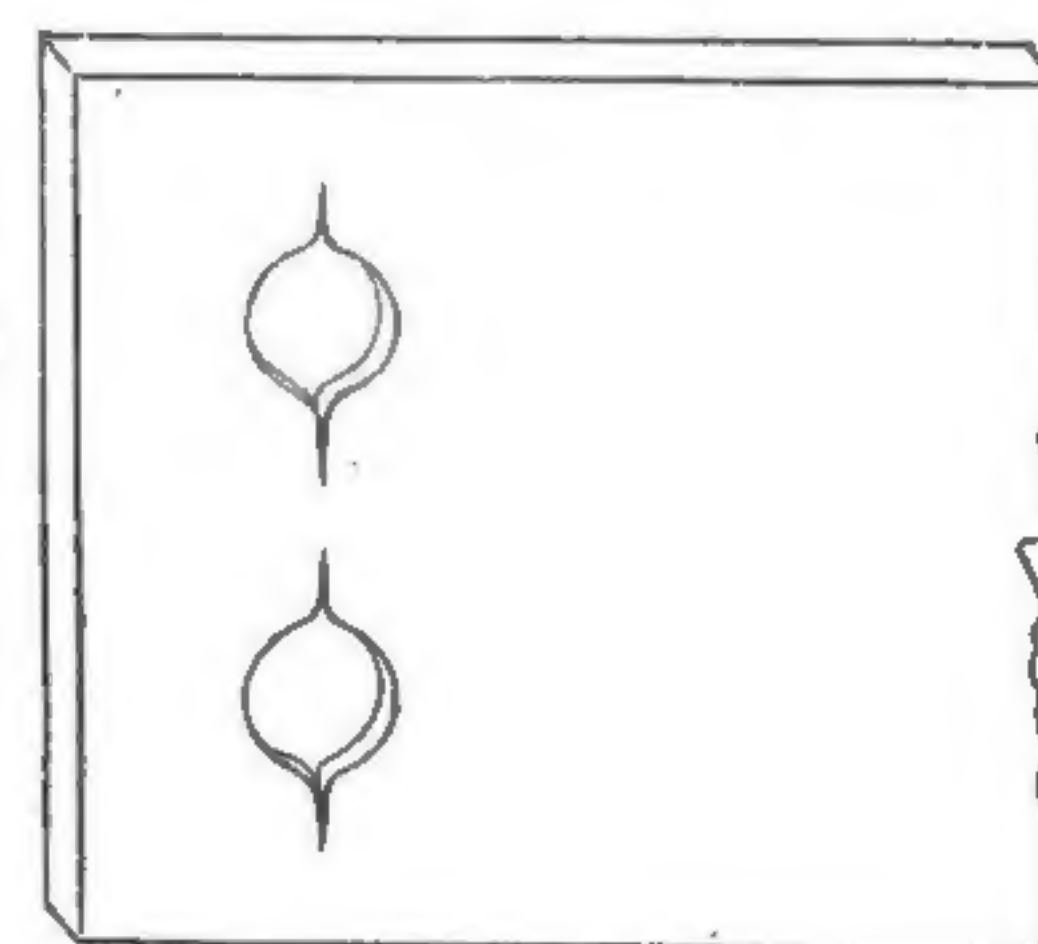


FIG. 3.

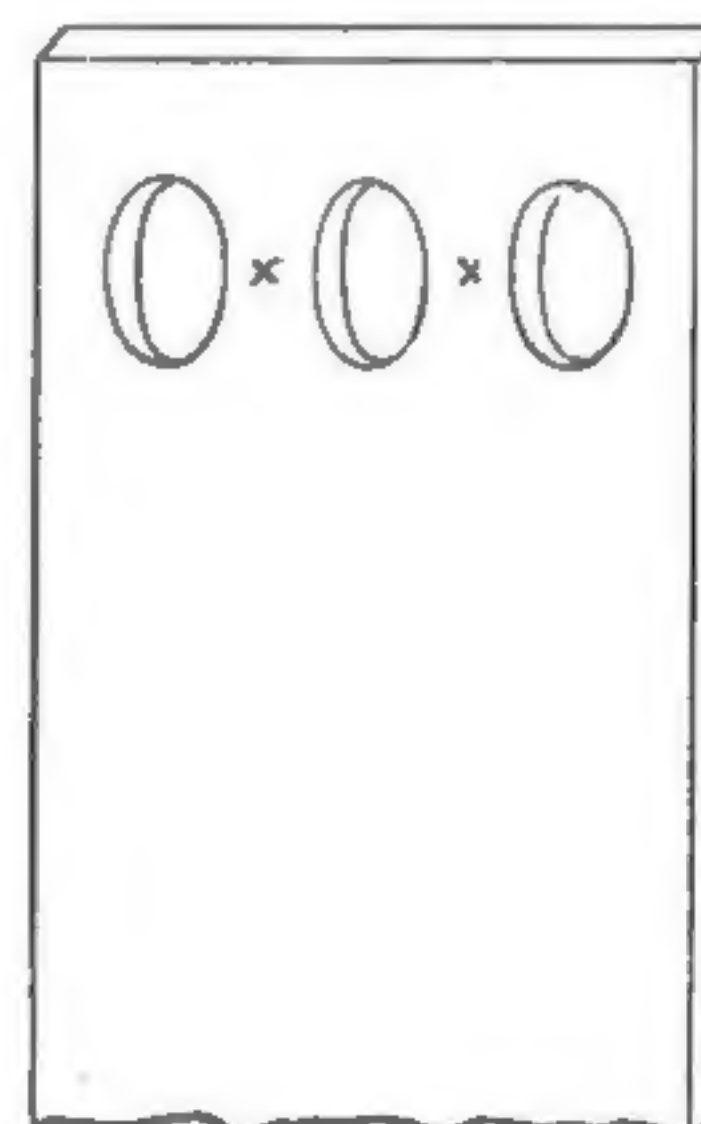


FIG. 7.

effect of temperature on the strength of the metal. Tests have been made at Watertown at 200°, 250°, 300°, 350°, 400°, 500°, 600° and 700° Fah., the highest strength being found in the neighborhood of 500° Fah.

GOLD AND SILVER FOR A YEAR.

According to announcement from Washington, D. C., the Director of the Mint, Edward O. Leech, in his yearly report shows that the value of the gold received at the mints during the fiscal year was \$49,228,923. The silver aggregated 37,438,778 standard ounces of the coining value of \$43,565,135. The coinage was the largest in the history of the mint, aggregating 112,698,071 pieces of the total value of \$60,254,436. Gold bars were exchanged for gold coin, free of charge, of the value of \$16,357,677. The imports and exports of the precious metals during the fiscal year aggregated as follows:

	Imports.	Exports.	Net loss.
Gold.....	\$13,097,146	\$17,350,193	\$4,253,047
Silver.....	27,524,147	36,069,602	8,545,455

The total amount of silver purchased during the fiscal year for the coinage of silver dollars was 30,912,111 standard ounces, costing \$26,899,326, an average of \$0.9668 per fine ounce. From the close of the fiscal year to August 13, the

date on which the new silver act went into effect, the amount of silver purchased was 3,108,199 standard ounces, costing \$3,049,426. The amount of silver bullion purchases under the act of July 14, 1890, which went into effect August 13 to October 31, has been 12,276,578 fine ounces, at a cost of \$14,038,168, an average of \$1.14349 per fine ounce.

There was a marked improvement in the price of silver during the fiscal year. At the commencement of the year the price was 42 pence, and at the close 47½, an advance of 5½ pence, equal to \$0.12½. The average price of silver for the fiscal year was \$0.96883 per fine ounce. Since the close of the fiscal year the fluctuations have covered a wide range. To July 14 the price advanced to \$1.08 an ounce, and to August 13 to \$1.13 per ounce. The highest price reached in New York was \$1.21 on August 19, and in London 54½ pence, equivalent to \$1.19½, on September 3. The price in New York did not vary materially from August 19 to September 3, when a decline took place, extending, with occasional slight advances, to the present price, \$1.07.

The Director estimates the stock of metallic money in the United States on July 1, 1890, to have been: Gold \$695,563,029; silver \$463,211,919. Total \$1,158,773,948. The total amount of metallic and paper money in circulation, exclusive of the holdings of the Treasury, on June 30, 1890, was \$1,435,610,612, a per capita of \$22.09, against \$1,380,418,091 at the commencement of the fiscal year, an increase in circulation of \$55,192,521. The number of silver dollars in circulation on June 30, 1890, was \$56,278,749, against \$54,457,299 at the commencement of the year. The number of silver dollars owned by the people, silver dollars and silver certificates in actual circulation, aggregated \$353,834,987, against \$311,612,864 at the commencement of the fiscal year. The number of silver dollars owned by the Treasury on June 30, 1890, was 15,591,479, against 21,889,786 on July 1, 1889.

The value of the precious metals used during the last year in the industrial arts in the United States was, approximately: Gold \$16,697,000; silver \$8,967,000, of which \$9,686,827 gold and \$7,497,932 silver were domestic gold and silver bullion. The product of gold from the mines of the United States during the calendar year was \$32,800,000; silver 50,000,000 fine ounces, commercial value \$46,750,000, coining value \$64,646,464. The product of the mines and smelters of the United States was: Gold 2,527,892 troy ounces; silver 60,236,469 troy ounces. The total purchases of silver for the coinage of silver dollars from March 1, 1878, to August 12, 1890, was 324,635,576.19 standard ounces, costing \$308,199,261.71, an average of \$1.058 per fine ounce. The total expenses of the mint service aggregated \$1,319,436.25. The total earnings from all sources were \$10,809,857, and the total loss and expenditures \$1,576,928, leaving a net profit of earnings over expenditures during fiscal year of \$9,232,929.

POOR WHEAT IN MANITOBA.

Despite the tall bragging about the "bumper crop" of "the first wheat ever grown on earth" in the province of Manitoba, Canada, this year, it is apparent that the crop in that province, while fair in quantity, is decidedly poor in quality. The Toronto "Electrical, Mechanical and Milling News," in its Winnipeg letter in its November issue, gives the following description of the state of affairs in Manitoba:

"At the time I closed my last letter, the situation in Manitoba and adjoining territory to the west was critical in the extreme. The country had experienced a month or more of the most unfavorable weather, right in the midst of harvest. These conditions were described in my last letter, but about that time the weather changed, and the prolonged wet spell was followed by between two and three weeks of beautiful weather. Farmers went to work with a will and rushed their stacking, completing it in good condition. The weather again set in wet during the week ended October 4th, and during the week ended October 11th there was almost a continuous rain, mixed with snow on some days. The wet spell again entirely stopped all work in the country. Threshing was completely suspended for ten days in one stretch. This work was just becoming general throughout the country, and the result of the wet is that at the time of writing the

amount of threshing done is comparatively trifling. In some districts considerable threshing has been done, but in other districts hardly anything has been done yet. This is serious, as it will delay threshing into the very cold weather. There are not enough machines in some sections, and with the heavy crops this year the work of threshing will be slow. When the weather becomes very cold, the machinery can not be worked to advantage, and if the cold weather comes in early this year, a good deal of threshing will have to be left until the temperature moderates toward spring.

"Another effect of the present wet spell is to stop deliveries of grain. Very little grain has been marketed yet, and the markets were only commencing to open up when the wet weather stopped deliveries. At a few points, where farmers are better supplied with help and machinery, considerable grain has been marketed, but the proportion marketed to the total crop is next to nothing. For instance, though the crop of oats is large, the quantity marketed has not much more than been equal to local requirements. At some points where it is estimated about half a million bushels of wheat will be received from this crop, the quantity to date is only 25,000 to 50,000 bushels, and sometimes less. This shows how the situation stands now. The result of the continued wet weather will be that practically nothing will be done in shipping out grain before the close of navigation. Grain will therefore have to be held over until spring, subject to elevator rates, or shipped out by the more expensive all-rail routes. Even should the weather turn favorable at once and remain so, it is not likely that any considerable grain movement would set in. Country roads are in very bad shape, and it will be some time before they will be fit for loads, though prairie roads usually dry up very quickly. It is now so late in the season that farmers will be obliged to push their fall plowing for all it is worth, and they will not take time to market wheat until it freezes up. Fall plowing is a necessity in this country, and just at the present time it is far more urgent than the marketing of grain.

"The most important feature of late in the grain trade was the fixing of standards at Winnipeg for grading this year's wheat crop. A large number of samples were collected from all parts of the wheat region, and these samples would afford the first clear idea of the quality of the crop. They more than bear out any former statements as to the damage done our wheat crop this year from unfavorable weather. To say that the samples were poor would be expressing it mildly. They were very poor. The most noticeable feature is the bleaching, the bulk of the samples being badly bleached. A bright sample of wheat will be something hard to find. Another defective feature is the large admixture of green kernels. A great many samples are affected in this way. The cause of this is partly due to the cold, wet weather during harvest, which caused uneven ripening. A second growth was started by the rain, and this green stuff is mixed up with the wheat. Another reason for the unusual mixture of green and unsound kernels is owing to the fact that some farmers became alarmed about frost and cut their wheat before it had properly matured. Some very inferior samples of wheat are the result of premature cutting. Quite a sprinkling of frosted samples were also on hand, some only showing a trace of frost, while others were badly frosted.

"As may be expected, with such poor samples to examine, the standards were not fixed very high. In fact, the standards for grading this year's crop are very low and are likely to cause considerable dissatisfaction. For instance, No. 2 hard shows a trace of frost, has some green and defective kernels, and is badly bleached. The Act only calls for two grades of hard, namely No. 1 and No. 2 hard, aside from the ornamental grade of extra Manitoba hard. It was evident that, unless a lower grade of hard wheat was established this year, the bulk of the crop would go ungraded, consequently to meet the peculiarities of the crop the examiners established a grade of No. 3 hard. The grade is not recognized as an established grade just the same. No. 3 hard as fixed is a black looking sample, showing frosted, green and shrunken kernels. It is a peculiarity of the crop this year that noth-

ing to grade No. 1 Northern has yet been seen. The wheat is nearly all hard. On account of the frost, two grades of No. 1 and No. 2 frosted were fixed, to allow of the grading of frosted wheat by itself, as a badly frosted sample could not be admitted in the regular grades.

"The figures of grain inspected at Winnipeg show further the quality of the crop. Up to date about 200 cars of wheat have been inspected at Winnipeg since new wheat began to move. Of these, only one car was good enough to grade No. 1 hard, or equal to one-half of one per cent. There were only six or eight cars graded frosted, but this would not include all the frosted wheat, only the more seriously frosted lots, as slightly frosted samples are allowed in with the regular grades of No. 2 hard and under. The balance of the total wheat inspected was distributed fairly evenly between the grades of No. 2 hard, No. 3 hard, No. 2 northern and rejected, the last two showing up the most. This shows conclusively that the Manitoba wheat crop is of unusually poor quality, and this poor quality is due mainly to the long-continued spell of wet weather during harvest. This is the only wet harvest experienced in this country for the past ten or fifteen years, with the exception of 1884, the latter part of which was wet. Wet harvests are therefore very rare here, but this one has proved a most remarkable exception to the rule. Some farmers, who were unaccustomed to wet harvests, stacked their wheat while it was damp, and considerable loss has resulted on this account. The present wet spell will also do further damage, as it is feared that there is a good deal of badly stacked grain which would not be impervious to the moisture. Some grain is also in stook.

"When the fine weather set in, some farmers left their grain in stook, intending to leave it until the thresher came around, as they thought the dry weather had come to stay, and they would be saved the trouble of stacking. In the meantime they went on with their plowing. This grain left standing will not be any the better of the soaking. The last wet spell will therefore further decrease the quality of the crop, where grain has been carelessly left standing in stook, or badly stacked. The crop is a large one in bulk, and with the prospect of higher prices this year than usual the inferior quality will be compensated for to some extent. Still it is not satisfactory to Manitoba to send out a crop of such quality as this one. As to the wisdom of reducing the quality of the grades on account of the low average of the crop, there is some difference of opinion. Ontario has a large crop of good wheat this year, and will not require much Manitoba wheat for milling. Our surplus will therefore have to be exported. Manitoba wheat is as yet almost unknown in British markets. When they receive our wheats from this crop they will certainly not form a very high opinion of our grades, and it may take some years to live down the possible prejudice which may be formed by the reduction of the quality of the different grades this year. If we are to export wheat regularly year after year, it is evident that an effort should be made to keep the different grades up to a uniform standard as nearly as possible, one year with another. If the weather continues unfavorable and winter sets in early, the effect of the prolonged delay in harvesting and threshing the crop will be felt seriously next year in curtailing the wheat area for 1891. The season is short here, and for wheat plowing must be done in the fall to render success reasonably certain. The delay to the harvest is therefore a serious matter for next year's crop, on account of the backward state of fall plowing. A long, open fall would remedy this disadvantage."

THE only grain elevators in South America, according to Consul Baker of Buenos Ayres, are located in the city of Buenos Ayres and Rosario, in the province of Santa Fe. Two of these are very large. One in Buenos Ayres covers 47,000 square feet and will cost \$5,000,000. At Rosario there is one with a capacity of 300,000 bushels. In addition to these there are two projected and now almost completed at Rosario, to cost \$300,000 each. The principal one is that known as the Central Produce Market, at Buenos Ayres.

Besides being a place of deposit, it is also a general market for all kinds of grain, wool, hides and other products. Goods are received alike by rail and by the primitive bullock carts. The building itself is the largest in South America, and the area of the premises is 30 acres. There is storage room for 238,000 metrical tons. Heavy merchandise, such as grain and iron, is stored on the ground floor, the top floors being reserved as a market.

POINTS IN MILLING.

MILLERS, who are inclined to trust grain-sellers beyond the point of prudence, should not forget that no one trusts the miller when it comes to quality of flour. The baker judges a mill solely by the bread made from its flour. He commends or condemns a mill and a miller according to the stock that comes out of the oven. The miller should be quite as exacting in the purchase of grain as the baker in the purchase of flour.

THE miller who buys grain of a number of farmers is sometimes at a disadvantage when some of his flour is pronounced bad. He can not always tell from which farmer he got the wheat that made the poor flour. The baker can always tell where he got his flour. He falls right back on the mill and criticises it. In such cases it would be a good thing for the miller to keep track of the flour made from each lot of wheat. In no other way can he tell which of his supply men are giving him good grain, and which are working off inferior grain upon him. The American practice of grinding single wheats greatly facilitates the keeping of a record that will at all times enable the intelligent grinder to place credit where credit is due, and blame where blame is due. It is unfair to Jones to class his good and sound wheat with Smith's poor and unsound wheat, and to complain that Jones' grain has lost him the custom of a baker or grocer, when the fault really lies in the grain he bought of Smith. Each grain-grower should have his due, either of praise or blame. Praise to the grower of fine grain will encourage him to grow fine grain. Blame to the grower of inferior grain will spur him to the abandonment of poor grain and the growing of good grain.

FARMERS generally are adopting the kinds of wheat for culture that are recommended by the millers whom they supply. In a recent visit to a number of mills in one of the winter-wheat regions, I found that, almost without exception, the farmers are guided entirely by the wishes of the millers in selecting varieties of wheat. It is a good plan all around. The farmers know that they have an assured market right at home, and they are independent of the market fluctuations in Chicago, New York or Liverpool, knowing that they will get a good square price for all the grain they grow. The millers know that they can depend upon their neighborhood supply. They know the quality of their grain, and their long experience enables them to mill it easily. They know the quality of their flour from the start, and, in cases where the home supply is equal to their wants, they are independent of distant sources of supply. Thus the "small mills," as they are called, are playing an important part in the culture of grain in the United States. The millers are more and more influencing the farmers in the choice of varieties. The result is good.

HERE and there may be found farmers who persist in "big yielders" in spite of all protests from flour-makers, but such growers can soon be taught that there is quite as much profit in harvesting 20 bushels from an acre, that will sell for 90 cents a bushel, as in harvesting 30 bushels that will bring only 50 or 60 cents a bushel. The farmer who grows what all millers want will get the highest price. The farmer who grows what no miller wants or will take, except under compulsion, will always get the lowest price.

Yes, the spring wheat, both in the Dakotas and Minnesota and Manitoba, is "off" this year. Samples are generally bad. Inspection in northwestern markets shows a very small proportion of No. 1 hard, in the American grain, while in the Manitoban markets the complaint is general

that the wheat is all below No. 1 hard by several grades. Of course all this is unfortunate for the growers in the north-western States and the Canadian province, but it is even more unfortunate for the millers who have to grind all the inferior grain. Grain that requires 10 to 15 pounds more of wheat to make a barrel of flour means extra work and care in milling. When the farmer sells his inferior wheat, he has done with it. When the miller has bought it, his troubles begin, and he must go on to the end of the chapter, trying to squeeze 4:58 or 4:60 so that he can come out even on the market with the flour that ought to be got out of 4:38 to 4:45. He must squeeze in nearly 6 per cent. more of wheat, do 6 per cent. more work, and yet come out whole or ahead at the same prices that prevailed last year, when the grain was all right. This means a good deal for the grinder.

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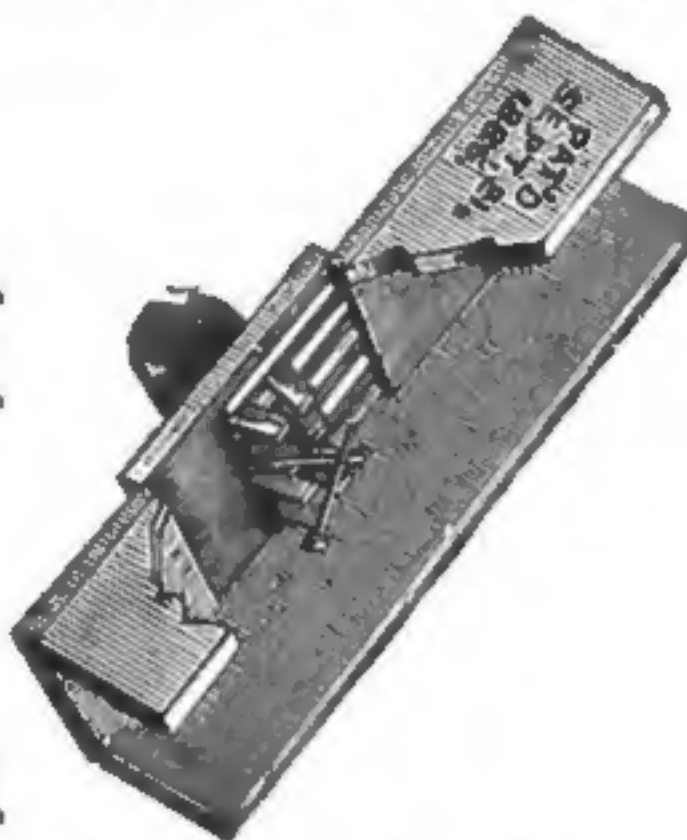


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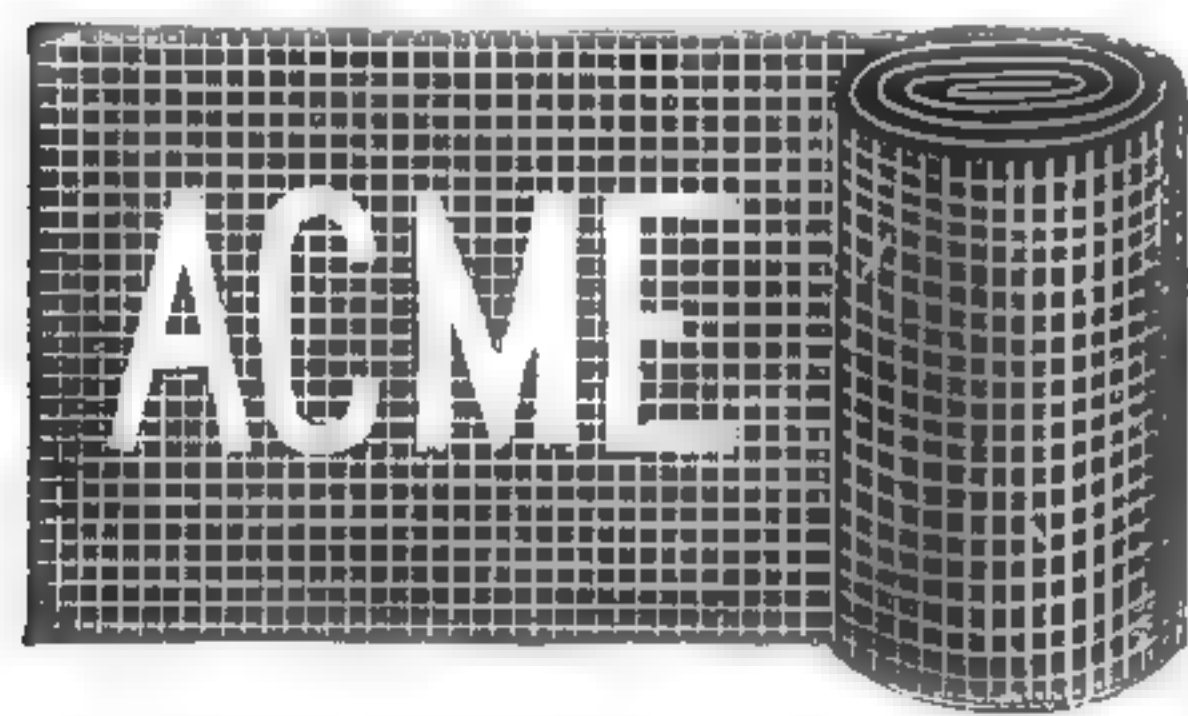
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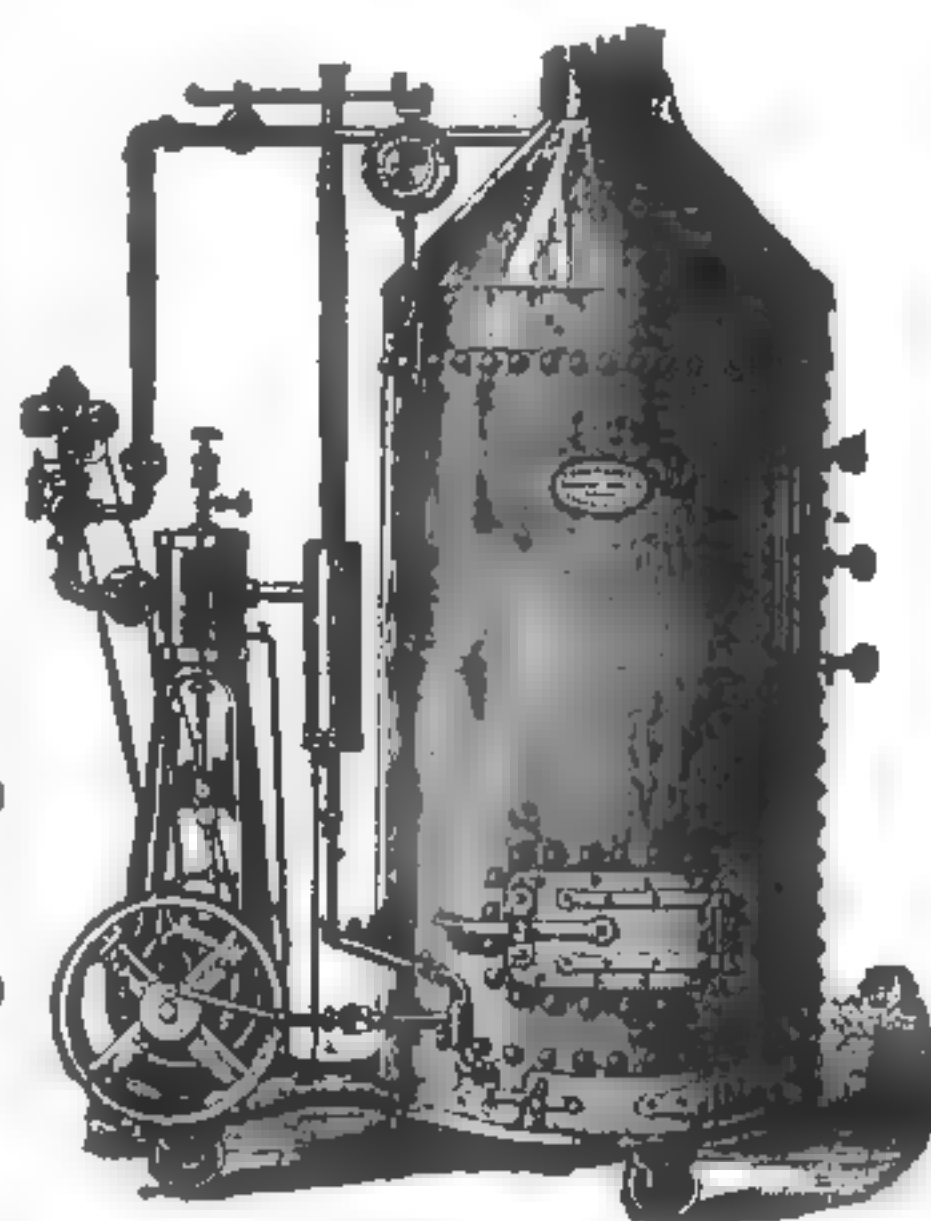
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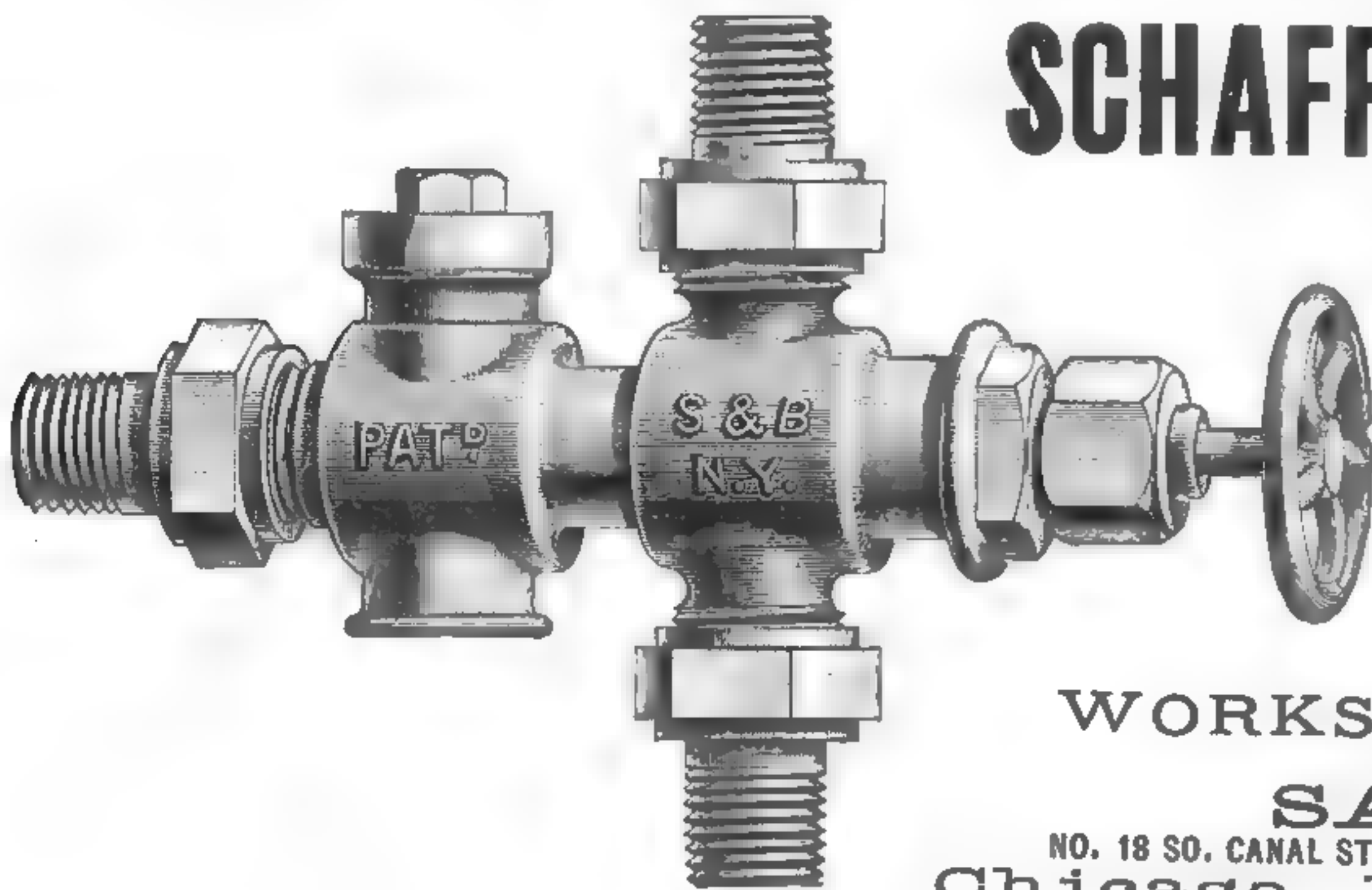
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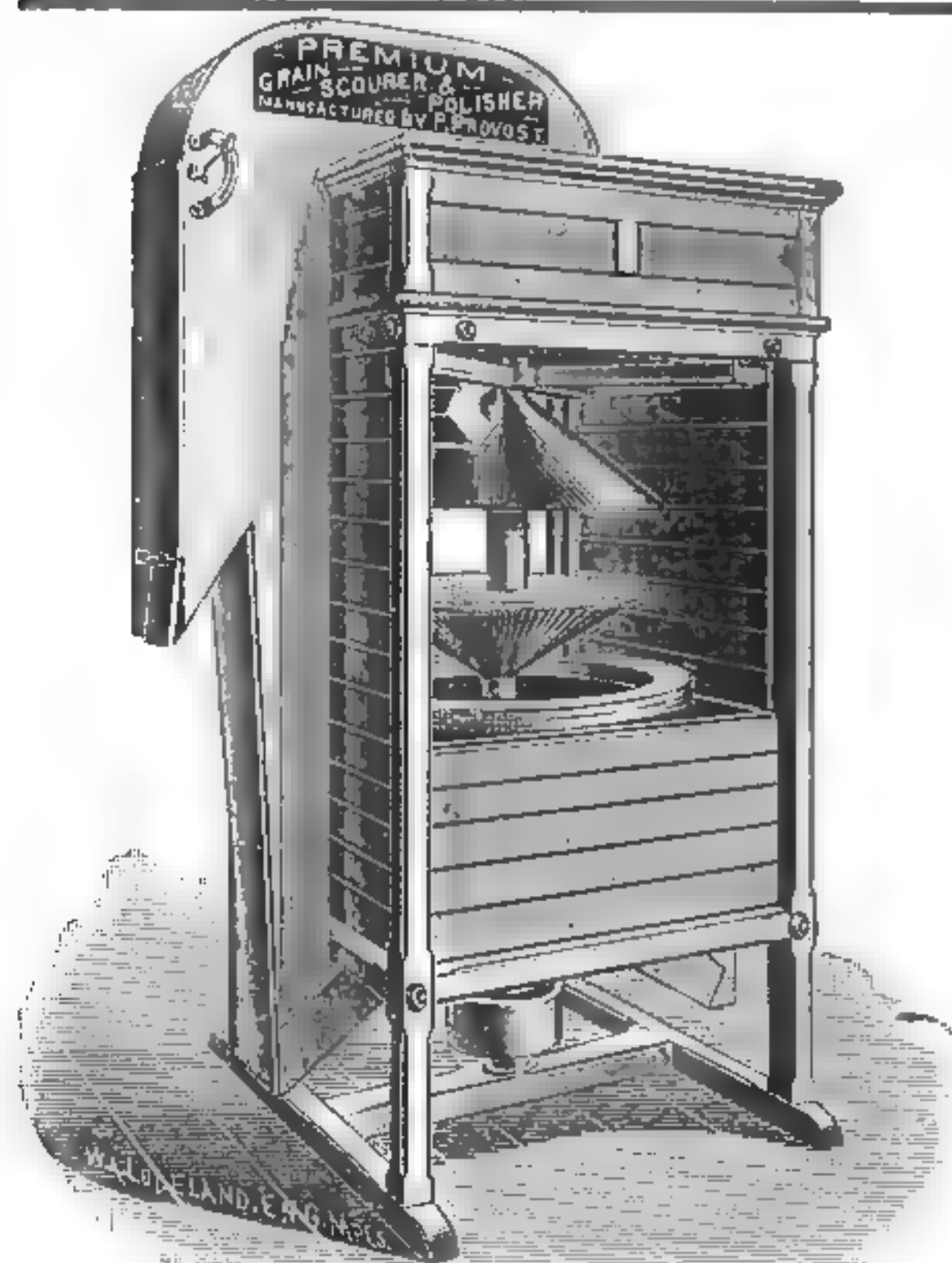
R. E. Hale, Callaways, Va., builds a flour-mill.
 Mr. Lampton, Ashland, Ky., builds a grist-mill.
 J. F. Piercy, grist-mill, Willshire, O., received.
 J. Courant, Castroville, Tex., improves flour-mill.
 J. Younger, Roxborough, N. C., built a grist-mill.
 The Grantville Ginning Co., Newman, Ga., will add a grist-mill to their plant.
 The Pioneer Oatmeal Mills, Port La Prairie, Manitoba, Canada, burned; loss \$20,000.
 Cassels, Pope & Co., Gadsden, Ala., will add a pearl-grits machinery to their mill.
 Schuett & Zuckerman, grist-mill, Saginaw, Mich., are succeeded by J. J. Schuett.
 The Blackstone, Va., Land & Improvement Co., have points on a new flouring-mill.
 Stephens & Goodrich, Chattanooga, Tenn., started a flour bin and sifter factory.
 Tolson, Scott & Co., millers, Highgate, Ont., Canada, are succeeded by R. C. Scott.
 J. F. Lewellyn's grist-mill and other property, Vanndale, Ark., burned; loss \$5,000; no insurance.
 C. E. Manor, Stanley, Va., has points on a new stock company that will build a 100-barrel roller flouring-mill.
 R. M. & T. F. Stevenson, Pocomoke City, Md., will remodel their mill to rolls; they want an outfit of machinery.
 J. H. Blackley, Staunton, Va., sold his property to Mr. Triplett, of Shenandoah, and others, for \$7,000. The purchasers will at once build a 200-barrel roller-flouring-mill.
 The crow does not fly from the corn-field without caws.—*Exchange*.—No, of course not. He simply stalks away because he's corns to eat after he has got full. He's not that sort of acrowbat.
 S. J. Pugh, Lancaster, Pa., is erecting a new mill and has placed his order for a full line of Case rolls, scalp-ers, flour-dressers, centrifugals, purifiers, bran-dusters and other machinery and supplies with the Case Mfg. Co., Columbus, O.
 The Washburn Crosby Milling Co., of Minneapolis, Minn., will build a flour warehouse at Fishkill Landing, N. Y., to hold 20,000 barrels and serve as a distributing center for flour. It will be 400 feet long by 30 wide, with railroad tracks on each side.
 The Case Mfg. Co., Columbus, O., have received the contract of A. E. Atherton, Atlas, Mich., for a full line of the celebrated Case rolls, scalp-ers, flour-dressers, purifiers, bran-dusters and other machinery and supplies for a full roller mill on the Case system.
 The Case Mfg. Co., Columbus, O., have orders for the Hoover Automatic Scale from Wilson Milling Co., Wilson, Kans.; Joplin Roller Mills, Joplin, Mo.; L. B. Weisenberg, Frankfort, Ky.; G. S. Wood & Co., Venice Center, N. Y.; L. A. Rizer, Keyser, W. Va.
 The Geo. T. Smith Manufacturing Company has been incorporated at Jackson, Mich., with a capital stock of \$500,000, all paid in, to manufacture purifiers. The principal stockholders are Geo. T. Smith, C. H. Plummer, of Saginaw, and the Smith Bros., of Jackson, Mich.
 The agents of the ship "Ruby," which recently arrived in Montreal, Canada, from England, were utterly unable to find a return cargo for her either at Montreal or Quebec, which would pay for loading and unloading. She therefore went back in ballast to the British Channel, where she will load coal for the Plate river. Twelve years ago a similar case occurred, but none since.

Dodson & Co. and Rolf Frerick, Hondo City, Tex., built a grist-mill.
 O. V. Showerman, of Sebewa, Oregon, reports a corn crop that probably the most fertile prairie lands of Illinois could not beat. From 15 acres of ground he gathered 1,150 bushels of sound corn and 250 bushels that was 90 per cent. sound, and of the 15 acres one acre was drowned out in the spring.

The Wells Elevator, Buffalo, N. Y., burned on November 6th. The loss on building and contents is about \$250,000. Insurance about \$85,000. The elevator belonged to the estate of the late C. J. Wells. The executors of the estate will rebuild the elevator. Adjoining property was damaged to a slight extent.

From St. Louis, Mo., this announcement is made: Within the week over half a million bushels of Oregon and California wheat have come to this market, and to-day 250,000 bushels were received. The last consignment was from Oregon. A much larger quantity is on the way from California. The high price of wheat in Eastern markets, coupled with the comparatively low price of grain abroad, has caused the far Western wheat grower to cast an eye towards the Mississippi Valley. The railroads that have secured only local tariff in grain have made very low trans-continental rates. This is almost a revolution in grain trade. One cause of this cheap rates, due to rivalry between Northern Pacific and Southern roads. Another reason is the very high ocean rates from San Francisco to European ports.

A GREAT AMERICAN MAGAZINE.—The success of *The Century* and its plans for 1891. *The Century* magazine is now so well known that to tell of its past success seems almost an old story. The New York *Tribune* has said that it and its companion, *St. Nicholas for Young Folks*, issued by the same house, "are read by every one person in thirty of the country's population," and large editions of both are sent beyond the seas. It is an interesting fact that a few years ago it was found that seven thousand copies of *The Century* went to Scotland, quite a respectable edition in itself. The question in England is no longer "Who reads an American book?" but "Who does not see the American magazines?" "The Gold Hunters of California," describing that remarkable movement to the gold fields in '47, in a series of richly illustrated articles written by survivors, including the narratives of men who went to California by the different routes, accounts of the gold discoveries, life in the mines, the work of the vigilance committees (by the chairman of the committees) etc., etc. General Fremont's last writing was done for this series. In November appears the opening article, "The First Emigrant Train to California," crossing the Rockies in 1841, by General Bidwell, a pioneer of pioneers. Thousands of American families who had some relative or friend among "the Argonauts of '49 will be interested in these papers. Many other good things are coming, the narrative of an American's travels through that unknown land Tibet (for 700 miles over ground never before trod by a white man); the experiences of escaping War-Prisoners; American Newspapers described by well-known journalists; accounts of the great Indian Fighters, Custer and others; personal anecdotes of Lincoln, by his private secretaries; "The Faith Doctor," a novel by Edward Eggleston, with a wonderfully rich programme of novelettes and stories by most of the leading writers, etc., etc. It is also announced that *The Century* has purchased the right to print, before its appearance in France or any other country, extracts from advance sheets of the famous Talleyrand Memoirs, which have been secretly preserved for half a century—to be first given to the world through the pages of an American magazine. All Europe is eagerly awaiting the publication of this personal history of Talleyrand—greatest of intriguers and diplomats. The November *Century* begins the volume, and new subscribers should commence with that issue. The subscription price (\$4.00) may be remitted directly to the publishers, The Century Co., 33 East 17th street, New York, or single copies may be purchased of any newsdealer. The publishers offer to send a free sample copy—a recent back number—to any one desiring it.



THE PREMIUM GRAIN SCOURER AND POLISHER.

This machine is guaranteed to do more and better scouring than any other machine in existence. Is easily set up, requires little or no care, except oiling.

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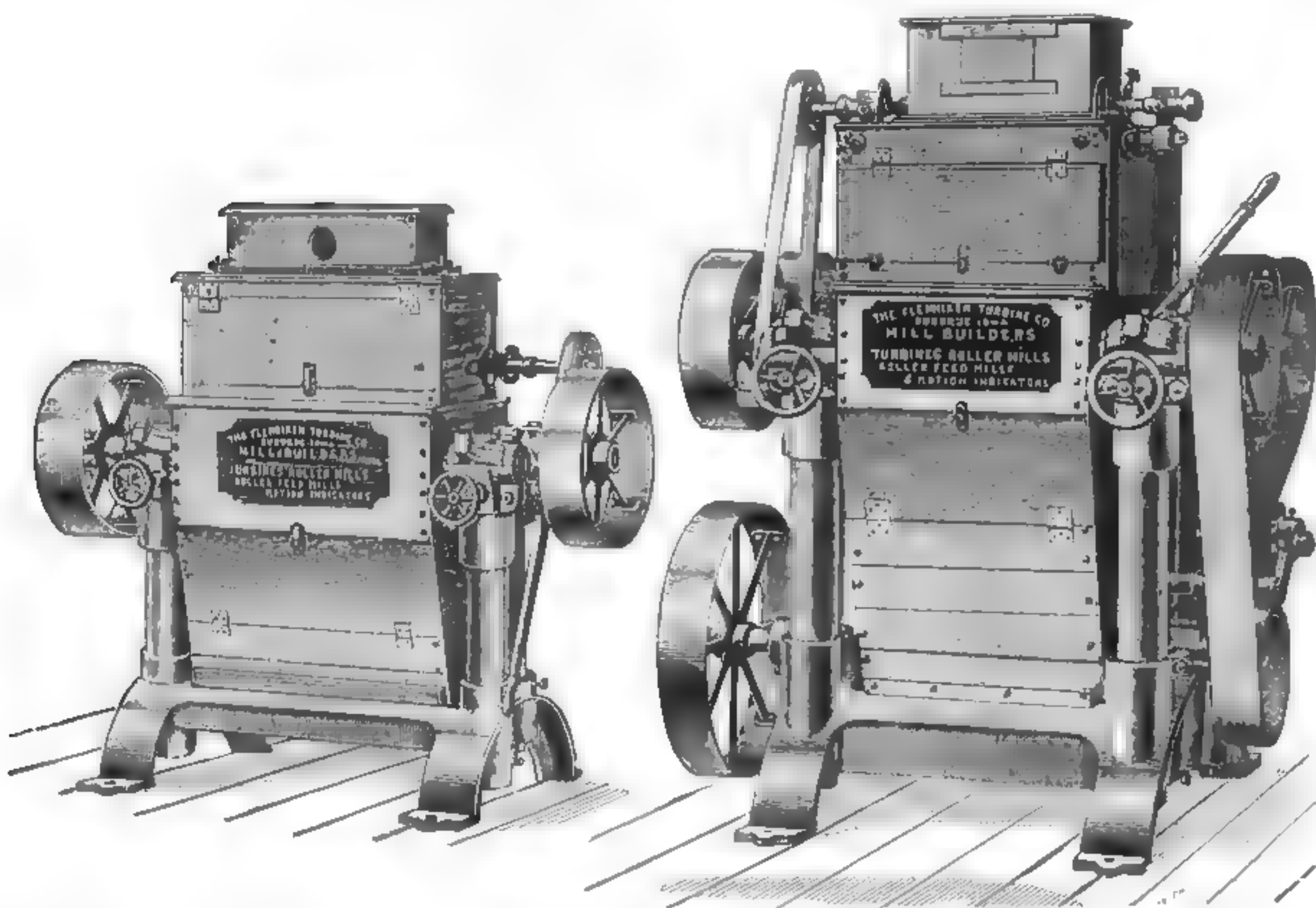
MINNEAPOLIS, MINN.

ONE REDUCTION TO THE FRONT!

*Ye jolly millers, one and all,
Who granulate with burrs,*

A Moses has Come to Deliver You from Egypt. Cease
Trying to Make Bricks without Straw. The Red
Sea of Expense Has Been Divided.

**The Wilderness of Reductions has Been Shortened. There
is Manna in Abundance for Those Who Believe.
Listen to the Glad Tidings of Great Jov!**



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A SUCCESS!** Two years of experience in a dozen States, with all kinds of Wheat and diversified climates, has justified us in recommending its adoption in place of burrs in each and every case, whether for grinding Wheat, Rye or Buckwheat. We have perfected Roller Mills, Bolts and Scalpers peculiarly adapted to the wants of Small Mills, and all our machines *infringe no patents*, and no claims are made that they do.

Having consummated a bargain with **MR. O. C. RITTER**, the author and patentee of **One Reduction**, which gives us the *exclusive right* to construct mills under his patents, our patrons in the future will receive a license from Mr. Ritter.

SPECIALTIES! { Graham Roller Mills, Round Reels and Scalpers, Sectional Round Reels, Grain Separators, Motion Indicators. Before buying any of these machines send for our prices and descriptive circulars. } **SPECIALTIES!**
Second-Hand Machinery, and Bargains in Every Line.

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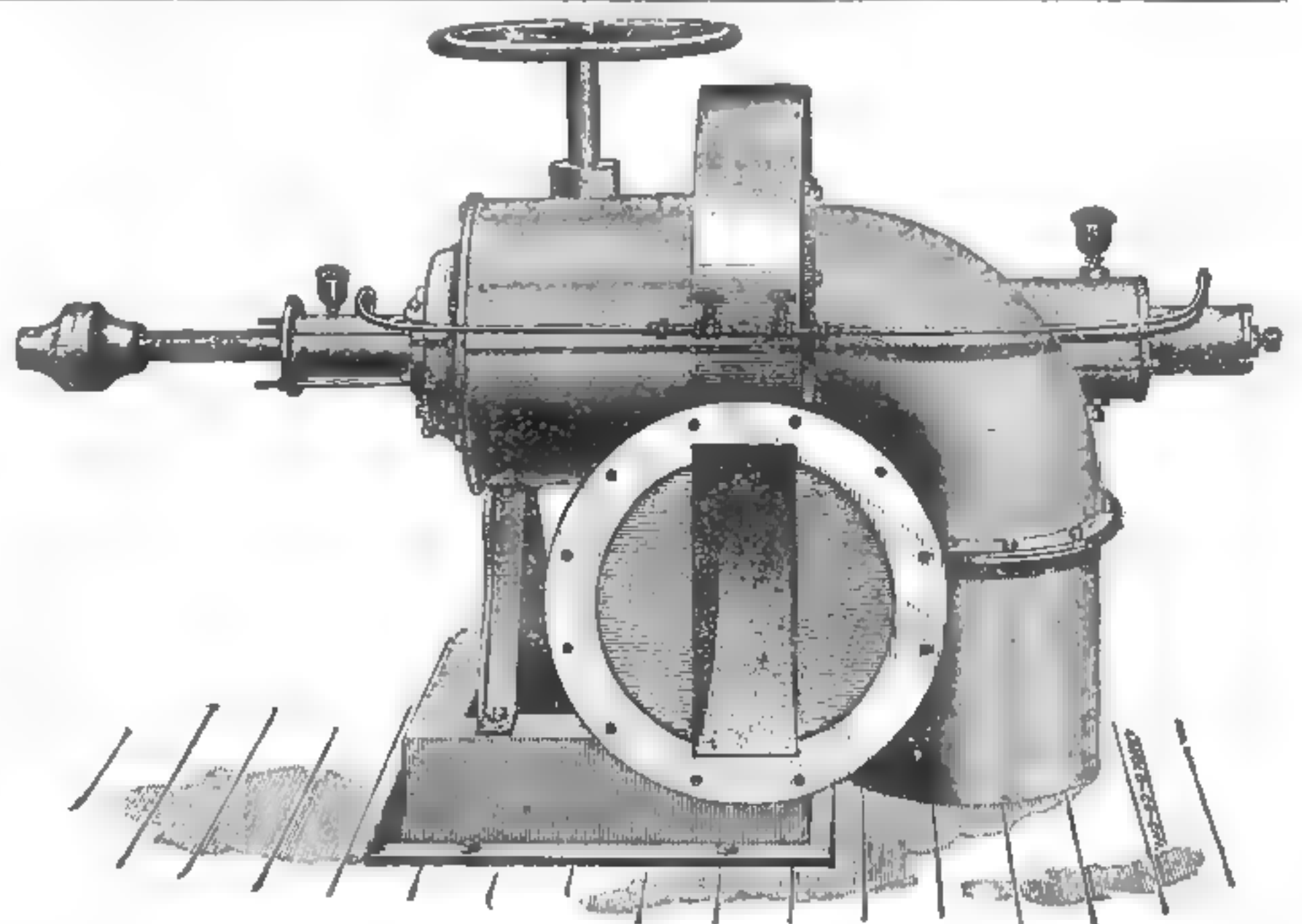
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DUBUQUE, - IOWA.



EUROPEAN ECHOES.

ACCORDING to the latest estimates, the wheat crop of Europe for 1890 is about 1,232,000,000 bushels, making necessary the importation of 160,000,000 bushels of wheat. The highest estimate of the crop is 1,296,000,000 bushels.

WHEAT exports from Russia from January 1 to September 22 this year aggregate 65,687,000 bushels, against 70,676,000 bushels for the same time in 1889, 80,090,000 bushels for same time in 1888, and 37,071,000 bushels for same time in 1887.

It is stated on English authority that the administration of the Indian Empire has cost the British treasury for the past 42 years \$170,000,000 annually in excess of the receipts. This would make a total deficiency during that time of \$7,140,000,000.

J. B. LAWES, the eminent English statistician, estimates the United Kingdom will require this year about 148,000,000 bushels of imports of foreign wheat and flour, or about the same amount as for two years past. Mr. Lawes publishes an estimate of the English wheat crop of 1890, making it 9,918,000 quarters, or 79,344,000 bushels, against about 64,000,000 bushels last year. Beerbohm takes exception to the estimate, and believes it much too high. The Government estimate will not be made public until December. Imports of breadstuffs into the United Kingdom from Sept. 1, beginning of the crop year, to Oct. 11, are equal to 21,890,433 hundredweights, against 18,406,993 hundredweights for the same time in 1889 and 18,616,508 hundredweights for the same time in 1888.

FOLLOWING is a table showing the effect of England's peculiar policy of free trade and restriction, in the case of Ireland, on the production of wheat, oats, potatoes, corn, flax, clover and green crops, together with the enforced reduction of population by emigration, all the figures being from official sources:

Year.	Land in corn, flax, green crops, meadow and clover.					Popula- tion.
	Wheat. Acres.	Oats. Acres.	Potatoes. Acres.	Acres.		
1852.....	353,566	2,283,449	876,532	5,739,214		6,336,880.
1855.....	445,509	2,117,955	911,529	5,612,992		6,014,665
1869.....	281,117	1,684,788	1,041,837	5,596,824		5,443,919
1889.....	91,131	1,237,135	787,152	4,147,196		4,716,209
Decrease since 1852.	262,435 or 74 p. c.	1,046,314 or 45.8 p. c.	89,380 or 10.2 p. c.	1,591,018 or 27.7 p. c.		1,620,680 or 25.5 p. c.

SAYS the London "Millers' Gazette" of October 30th: It might have been expected that the agricultural press of the country would have received the recent circular-letter of the National Association of British and Irish Millers for what it really was, an honest endeavor to improve our greatest industry, agriculture. But, no; it is characterized as indiscreet and unnecessary. The "Agricultural Gazette" says it believes that there are few of its readers who require the advice contained in the said circular, while the "Mark Lane Express" expresses its opinion thus: "A miller's circular, recently sent around, with perhaps more zeal than discretion, to all the press, advises farmers to grow better wheat and avoid sowing tail corn. Some agriculturist may be disposed to resent such advice as nothing more or less than an impertinence, but the wiser of our readers will be content with a smile, knowing very well how dependent millers still are on English wheat for kindly working in their mills, and how much they have to fear from a diminishing cultivation of the cereal within the British Isles. Importers are stronger holders than farmers, and within the last few years there have been several occasions, and those the most critical, when the good deliveries of farmers, on the stimulus of a very slight advance, have alone stood between millers and the certainty of a very sharp rise in foreign grain. Even now English wheat, on its merits, is fairly under-selling imported wheat." Any further decad-

ence of British wheat-growing would be a matter of extreme regret; but it is a great mistake to suppose that millers are so dependent on British grain as our cotemporary states. As a matter of fact, given a good average yield, with the present area, in every other country, and the 9,000,000 to 10,000,000 quarters of British wheat annually grown might entirely disappear without having any lasting effect upon values, while from a technical point of view nine out of ten roller-millers prefer foreign to English grain. We are afraid that our cotemporary is somewhat blind to the interests of those it desires to serve. The simple object of the miller is to persuade the farmer to grow that kind of wheat, bearing in mind, of course, local conditions and soils, best suited for milling, and for which, it follows, the miller would be able to pay a better price than he does now. If the best class of wheats were grown, in fact, the demand would be greater, the supply would follow, the price would be higher, and the nation would be the richer.

SAYS the London, England, "Millers' Gazette:" It is a very great pity that shippers of Indian wheat, and those interested in the extension of its use among British and Irish millers, do not take some steps towards ridding the wheat before it is shipped of the superfluity of "dirt" with which it is mixed. The advanced miller does not object to the ordinary impurities in the wheat, but the simple unalloyed "dirt" is becoming a greater nuisance than ever, and unless something is done towards checking the evil, Indian wheat, instead of growing in favor with our millers, will become "a thing to avoid," whatever may be its price. The dirt or mud in Indian wheat has qualities peculiar to itself; it is not like the dirt in other wheats; in the course of transit it becomes reduced to an almost impalpable powder, the result being that when it is moved in bulk it creates clouds of smoke-like dust of a peculiar obnoxious character, which no aspiration seems able to remove. Quite recently we were in a large mill where Kurrachee wheats, in bulk, were being discharged from barges by means of elevators; directly the wheat was agitated by the movement of the elevator-cups, clouds of dust arose, obscuring everything; and although the wheat was passed through warehouse separators, with their powerful fans exhausting the dust, when the wheat reached the store the dust was almost as great as before. In this particular case the matter has become a public nuisance; and the miller, who would, if the wheat were suitable, be able to use 2,000 to 3,000 quarters per week, can not now touch it.

A big-yielder claims that he will have a mill at Chicago three years hence which will make 14.93 barrels of "flour" out of 50 bushels of wheat. * * * Bill Backwoods is writing a book on "How to Make a Barrel of Flour out of Two Bushels of Wheat." One peculiar feature of the book is that it will not refer to Pierson Wilson or other big-yielders who have long since disappeared.—Chicago "American Miller."

CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.

A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

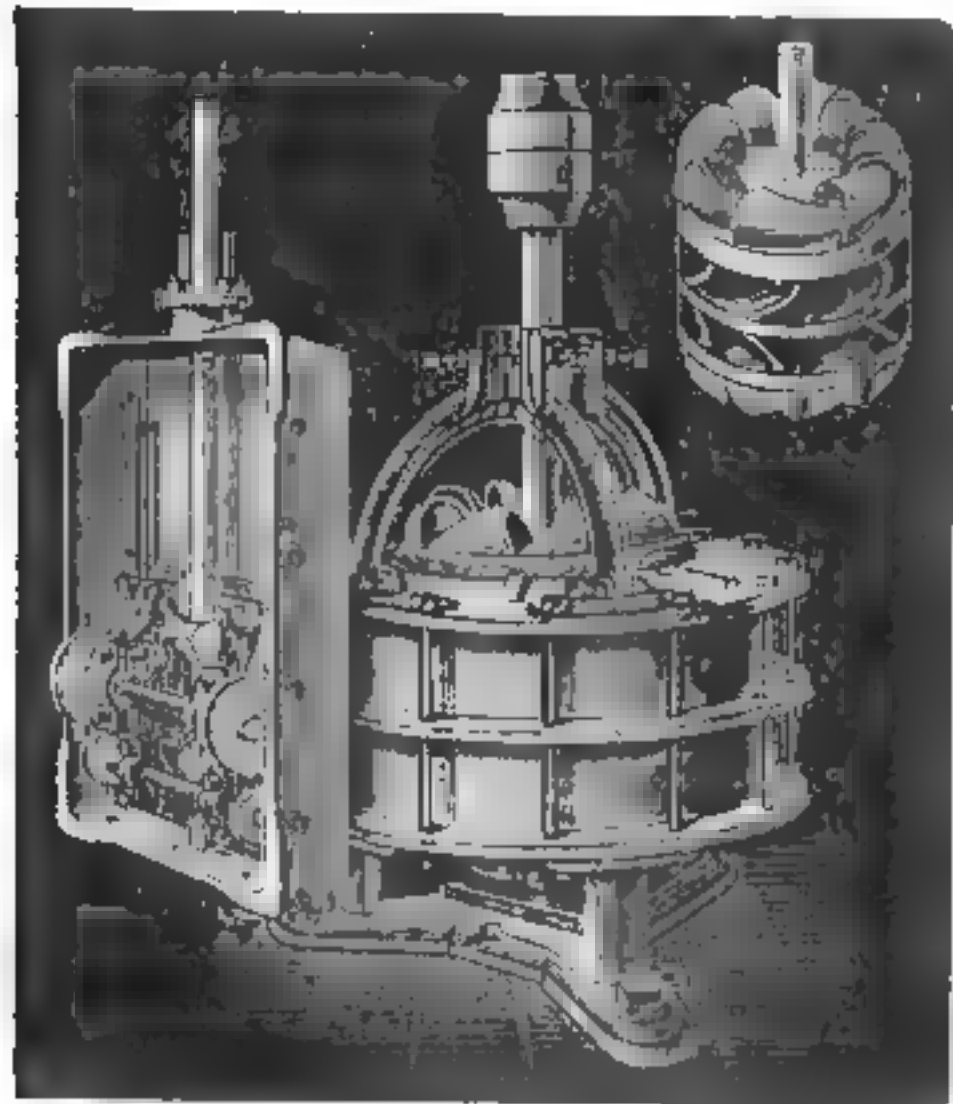
N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.

Good Housekeeping for November ■ has the usual variety of helpful articles in the interest of the household. There is an especially valuable one on "Gruels and Drinks for the Sick," another on "Pianos and Their Care," either of which will well repay a subscription to the magazine. Clark W. Bryan & Co., publishers, Springfield, Mass.

LITTLE GIANT WATER WHEEL

—MANUFACTURED BY—

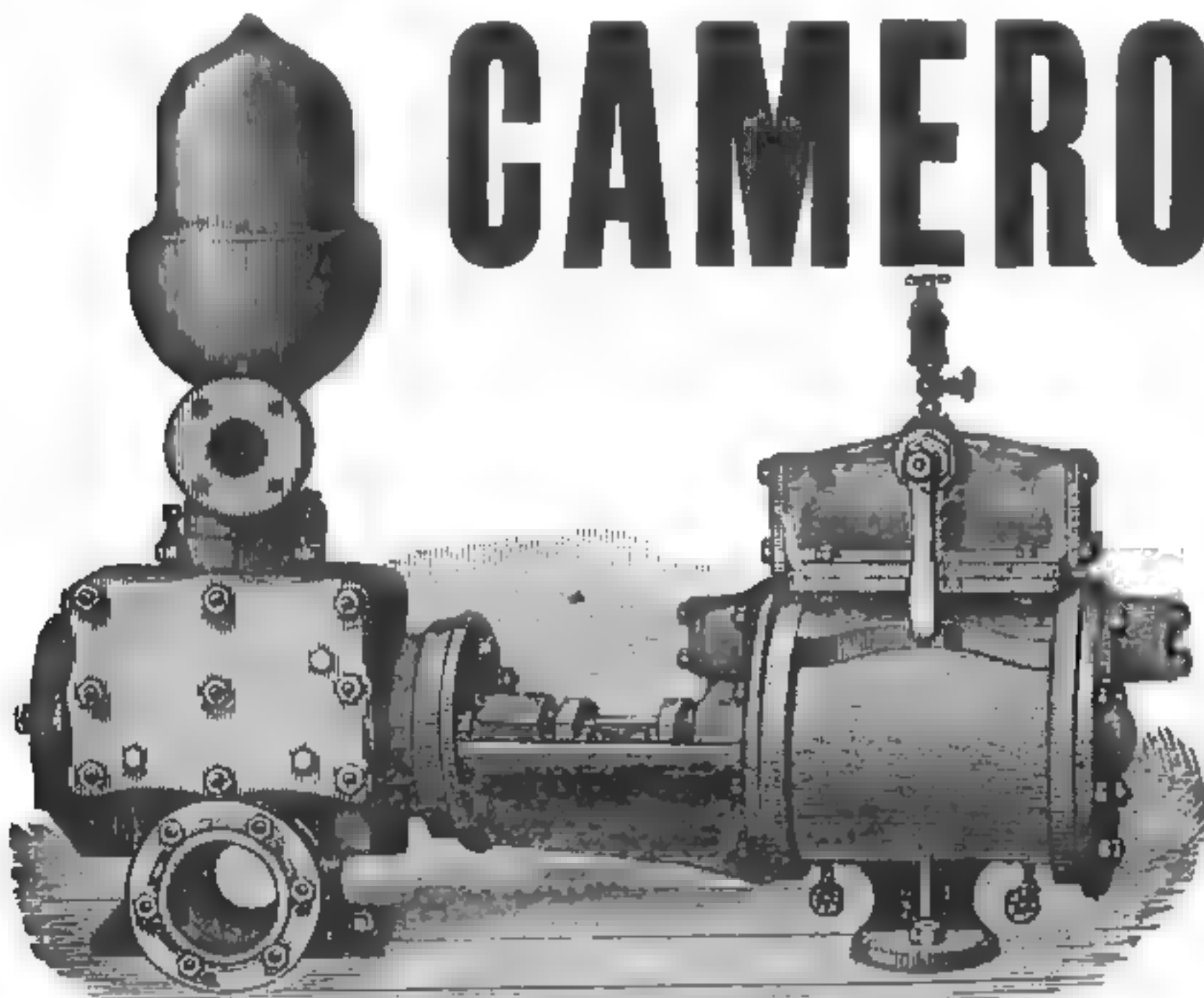


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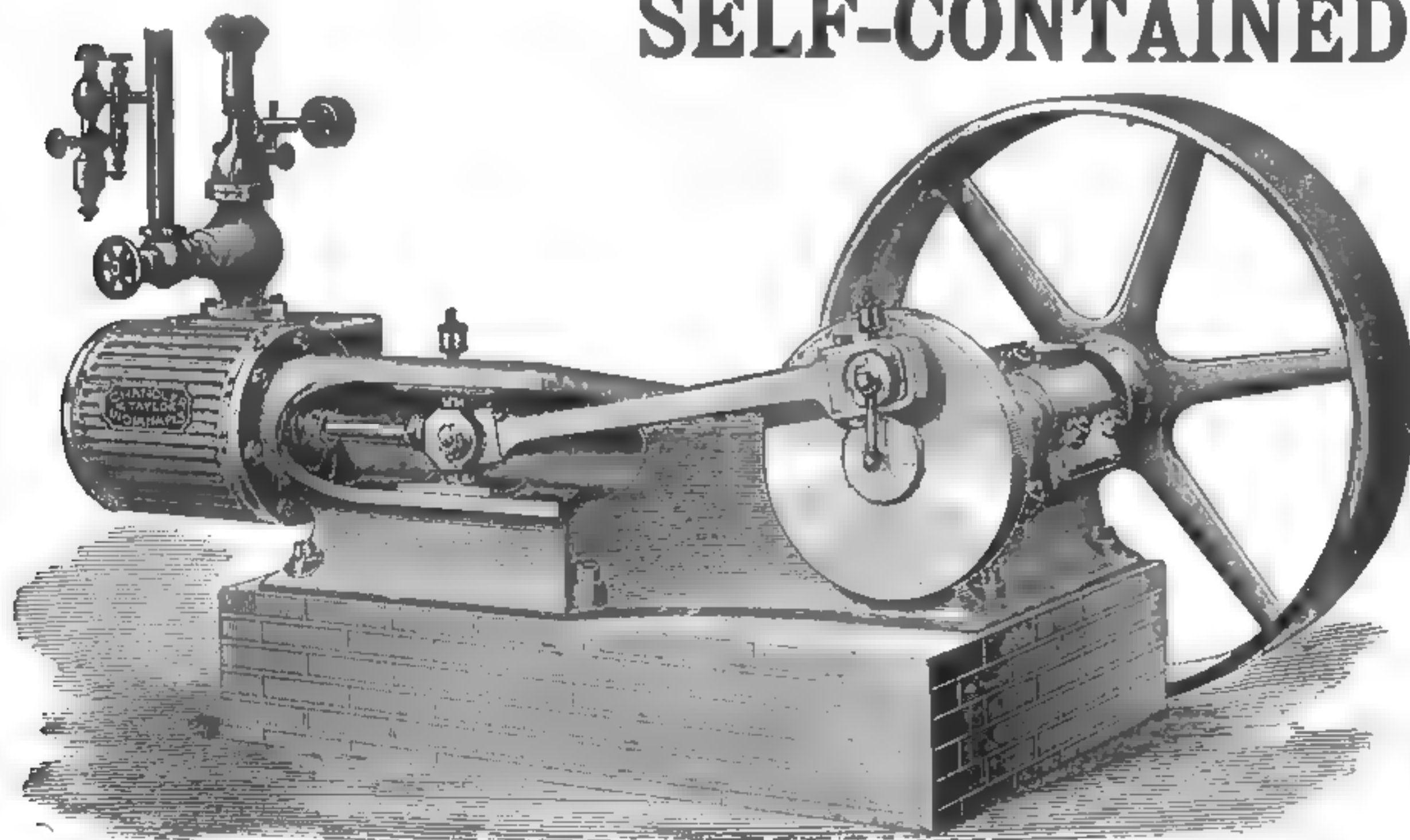
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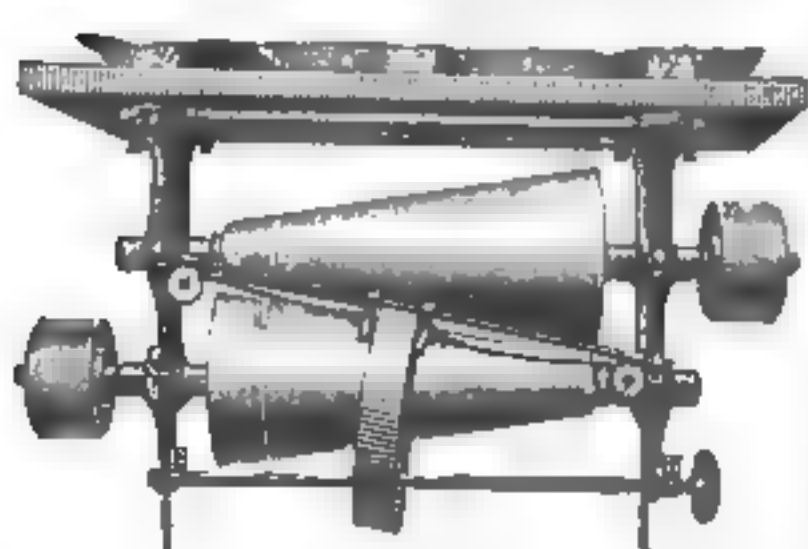
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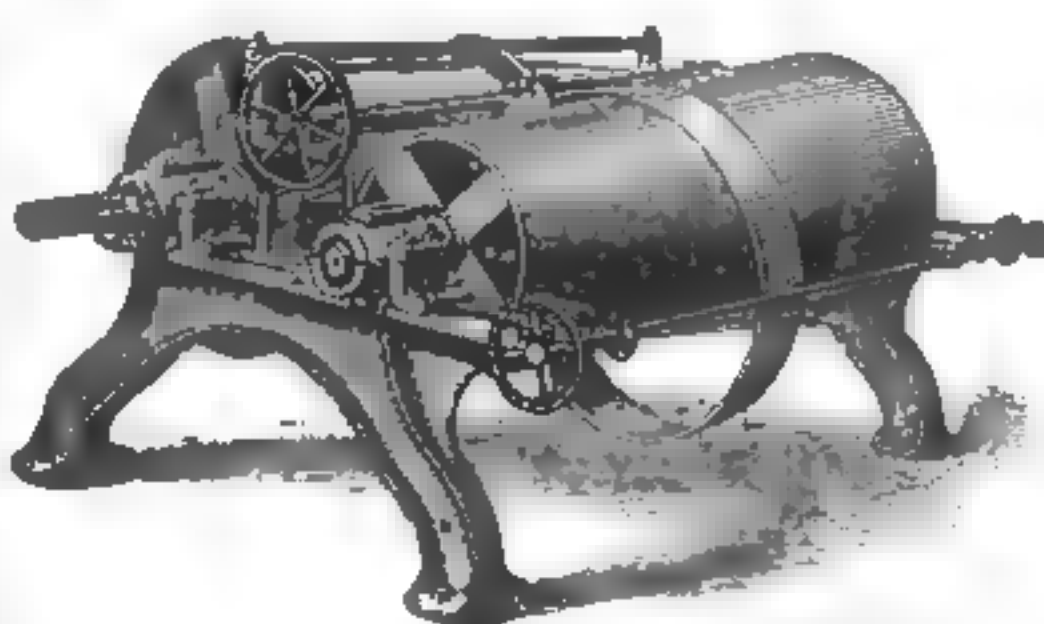
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Machinery a Specialty.

THE EVANS FRICTION CONE & FRICTIONAL GEARING

"PATENTED."



This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is



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CAN SAVE TIME
AND
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BY USING
**BARLOW'S
PATENT
MANIFOLD
SHIPPING
BLANKS** SEND
SAMPLE SHEET FOR PRICES
BARLOW BROS. GRAND RAPIDS, MICH.



OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., Nov. 8, 1890.

Friday of last week was a day of firm and dull markets, on stronger cables and smaller receipts and demands. In New York November wheat closed at \$1.07½, December at \$1.09, January at \$1.10, and May at \$1.12½. Atlantic port receipts were 168,951, exports 26,867, and options 1,464,000 bushels. November corn closed at 60c., December at 62c., January at 60½c., and May at 62c. Receipts were 76,192, exports 65,144, and options 1,232,000 bushels. November oats closed at 48½c., December at 52c., and May at 52½c., with receipts 195,970, exports 19,903, and options 135,000 bushels. During October the visible wheat supply fell 6,000,000 bushels below that of a year ago, and the amount afloat decreased 6,000,000 bushels. It is estimated that France will need to import 50,000,000 bushels this season, against 30,000,000 last year, and that Great Britain will import 150,000,000 bushels. Wheat flour was stagnant. The close of October saw New York flour stocks 100,000 barrels more than a year ago and 121,000 more than a month ago, of which 134,320 were spring and 132,650 winter; total 267,100, against 146,875 last month and 167,770 last year. Receipts included 5,220 sacks and 35,816 barrels, and exports 21,433 sacks and 15,216 barrels. Millers' limits were not reduced, but the stagnation of the markets will make them yield, unless wheat turns upward again, which the bulls are predicting and the bears are fearing. The minor lines were featureless.

Saturday was a day of dull, but strong, markets, on small domestic movement, smaller foreign stocks and improved cables. The announcement of the population of the United States by Census Superintendent Porter, who places the total at 62,480,540, where the newspaper reporters and the produce gamblers had figured out from 65,000,000 to 75,000,000, did not have any effect on prices, although the smaller total means less cereal consumption at home and a consequently greater available surplus for export. November wheat closed at \$1.07½, with receipts 55,099, exports 3,990, and options 896,000 bushels. Liverpool wheat stocks were 2,235,000 centals, against 2,332,000 on the first of October. November corn closed at 60½c., with receipts 87,933, exports 28,484, and options 680,000 bushels. Liverpool corn stocks were 1,246,000 centals, against 1,407,000 a month ago. The situation seemed to be very strong in wheat, corn and oats statistically, and students of the wheat market could see nothing but higher prices ahead, as it is becoming more and more apparent that our exportable surplus will hardly answer the demand that is inevitable. Wheat flour was dull, but holders were very steady. Liverpool stocks were 92,000 sacks, against 106,000 a month ago. Receipts included 12,202 sacks and 32,144 barrels, and exports 4,440 sacks and 11,109 barrels. Western millers and receivers believe in higher prices. The minor lines were generally firm.

Monday brought generally dull, weak and lower markets. Large stocks of wheat at Minneapolis weakened that cereal, and the others followed it downward. November wheat closed at \$1.06½, December at \$1.08, January at \$1.09½, and May at \$1.11½. Receipts were 193,256, exports 29,591, and options 1,125,000 bushels. Large western receipts set the weary longs to realizing. November corn closed at 60½c., December at 61c., January at 61½c. and May at 62½c. Receipts were 140,235, exports 5,242, and options 448,000 bushels. November oats closed at 49½c., December at 50½c., and May at 52½c. Receipts were 262,977, exports 20,306, and options 195,000 bushels. Wheat flour was dull and flat on the break in wheat,

although millers maintained their limits. Receipts were 14,396 sacks and 39,711 barrels, and exports 8,052 sacks and 925 barrels. The minor lines were featureless. The visible supply in the United States and Canada was:

	1890. Nov. 1.	1889. Nov. 2.	1888. Nov. 3.
Wheat.....	21,235,381	25,713,506	33,695,199
Corn.....	7,017,335	7,793,649	10,773,067
Oats.....	4,161,657	7,005,354	8,554,981
Rye.....	717,321	1,251,060	1,556,616
Barley.....	4,846,679	2,313,089	1,786,400

Tuesday was given up to the excitement of election, and bulls and bears rested from the excitements of speculation.

Wednesday was a day of dull, weak and lower markets, on larger imports and shipments to Europe, and on selling out by longs. The quantities on passage were large and aided in weakening the markets perceptibly. November wheat closed at \$1.05½, December at \$1.06½, January at \$1.08, and May at \$1.10½. Receipts were 115,988, exports 123,166, and options 1,888,000 bushels. November corn closed at 59½c., with receipts 129,519, exports 19,000, and options 592,000 bushels. November oats closed at 49½c., with receipts 143,502, exports 12,435, and options 385,000 bushels. Buckwheat grain was easy at 56½c. Rye grain was nominally easy at the following quotations: State 75½c.; Western 71½c.; Canada 71½c. afloat; car lots on track 68½c. for ungraded. Barley was stronger on Western, on recent sales at 78½c. for ungraded. Canada firm but unchanged. Quotations; No. 1 Canada \$1.00; extra do 94c.; No. 2 do 90c.; No. 3 Milwaukee 83½c.; Western 79c. @ \$1. Malt was nominally firm at the following quotations: 75½c. for 2-rowed, 80½c. for 6-rowed, 85½c. for country-made Canada and 92½c. @ \$1.00 for city do; new 2-rowed State 95c.; 6-rowed do \$1.02½ @ 1.05; Canada country-made and city-made \$1.00 @ 1.20 for cash and long time. Mill-feed was so firm that nothing was doing, yet held at old prices. Quotations: 97½c. @ \$1.00 for 40 and 60-lbs.; 80-lbs nominal; 100-lbs \$1.15; rye \$1.05 @ 1.10.

Wheat flour was dull, weak and lower generally, and sales went at concessions of 5 @ 10c. in some cases, while some other lines brought old prices. Receipts were 22,595 sacks and 60,281 barrels, and exports 22,159 sacks and 20,188 barrels. Among sales were the following: Extra No. 1 at \$4.25 for low winters; clear and straight winters, \$4.80 @ 5.10 and \$5.25 @ 5.40 for patent winters; city mills at \$5.25 @ 5.45, chiefly \$5.35, in old barrels, as to brand, in lots. Rye mixtures in lots, \$4.50 @ 4.75, in barrels; good do at \$4.65; 600 sacks winter patents at \$5.15 for common; common no grade in sacks at \$2.45; spring clear at \$4.25 in sacks to \$4.75 in barrels; spring supers in barrels at \$3.25; spring patents at \$5.60 @ 5.65 for choice new to \$5.45 for fair; old, \$5.75 @ 6.00 in small lots standard to fancy; winter straights at \$5.00 @ 5.15, chiefly for export; clear do, \$4.74 @ 5.00; Southern at \$5.00.

Rye flour was in good demand and steady at \$3.90 @ 4.25 for the range. Buckwheat flour was in better demand at \$2.00 @ 2.20. Corn products were quiet at the following quotations: Western and Southern in barrels \$3.05 @ 3.25; Brandywine \$3.25; granulated yellow \$3.25 @ 3.35; granulated white \$3.50 @ 3.60; coarse bag meal \$1.12 @ 1.15; fine yellow \$1.22 @ 1.24; fine white \$1.27 @ 1.32 for city; Southern \$1.12 @ 1.62 for coarse to granulated; brewers' white \$1.44.

The following shows the amount of wheat and flour, together with the amount of corn, on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1890. Nov. 4.	1890. Oct. 28.	1890. Nov. 5.
Wh. & flour, qrs.	1,792,000	1,713,000	1,844,000
Corn, qrs.....	364,000	361,000	470,000

The following shows the amount of wheat and corn on passage to the Continent for the past week, the previous week, and for the same week last year:

	1890. Nov. 4.	1890. Oct. 28.	1889. Nov. 5.
Wheat, qrs....	652,000	620,000	739,000
Corn, qrs.	109,000	110,000	134,000

	Qrs.
India wheat to United Kingdom.....	20,000
India wheat to Continent.....	45,000

The imports into the United Kingdom for the past week and the previous week and for same week last year:

	1890. Nov. 4.	1890. Oct. 28.	1889. Nov. 5.
Wheat, qrs.....	254,000	279,000	286,000
Corn, qrs.....	85,000	128,000	133,000
Flour bbls.....	142,000	203,000	148,000

Thursday brought greater weakness and more activity in some lines. November wheat closed at \$1.05½, with receipts 87,000, export 740, spot sales 71,000, and options 1,168,000 bushels. November corn closed at 59½c., with receipts 70,000, exports 40,000, spot sales 173,000, and options 1,064,000 bushels. November oats closed at 49c., with receipts 74,000, spot sales 141,000, and options 305,000 bushels.

Wheat flour was weaker and more active, with receipts 34,000 and sales 23,000 packages. Quotations were as follows: Low extras \$3.70 @ 4.15; city mills \$5.25 @ 5.50; city mill patents \$5.50 @ 6.25; winter wheat low grades \$3.70 @ 4.15; fair to fancy \$4.25 @ 5.40; patents \$4.90 @ 5.75; Minnesota clear \$4.50 @ 5.25; straight \$4.90 @ 5.60; Minnesota straight patents \$5.25 @ 6.00; rye mixture \$4.30 @ 4.90; superfine \$3.15 @ 3.85. The output of the Minneapolis mills last week was 180,000 barrels.

BUFFALO MARKETS.

Buffalo, N. Y., November 8, 1890.

This market has not followed New York and Chicago closely. The feeling here is one of general firmness. Quotations are as follows:

WHEAT—There was more demand and sales were made of 16,500 bu No. 1 hard at \$1.08½; 6 cars at the same, and 100 bu do at \$1.09; 6,000 bu No. 1 Northern at \$1.08½; 600 bu do at \$1.04, and 600 bu do at \$1.04½; 1 car of No. 2 red winter at \$1.03½; 2,000 bu No. 1 Oregon white at 95½c and 10,000 bu do at 95c. CORN—The market opened easy, but closed firm at 58½c for No. 2 yellow; 57½c for No. 3 yellow; 56½c for No. 2 corn and 56½c for No. 3 do. Sales of No. 2 corn were reported at 56½c @ 56½c. OATS—The market was generally steady, closing firm at 51½c for No. 2 white, 50½c for No. 3 white, and 48½c for No. 2 mixed. Several cars of No. 1 white were sold early at 51c. BARLEY—Nothing is done in Canada. No. 2 Michigan sold to-day at 81½c; No. 2 Western at 76½c, and No. 3 do at 72½c. RYE—The market is entirely nominal at 73½c for No. 2. OATMEAL—Akron, \$7.20; Western, \$6.95 per bbl; rolled oats, in cases, 72 lbs, \$3.85. CORNMEAL—Coarse, \$1.15 @ 1.20; fine, \$1.20 @ 1.35; granulated \$1.75 per cwt. MILL-FEED—City-ground coarse winter, \$17.00 @ 18.90 per ton; fine do, \$18.00 @; finished winter middlings \$19.50 @ 20.00; coarse spring do, \$19.00.

FLOUR MARKET.

Spring Wheat.	Winter Wheat.
Patents..... \$6.25 @ 6.50	Patents..... \$6.25 @ 6.50
S't Bakers'... .. @ 5.75	S't roller... .. @ 5.25 @ 5.50
Bakers' cl'r... .. @ 5.25	Amber... .. 5.00 @ 5.25
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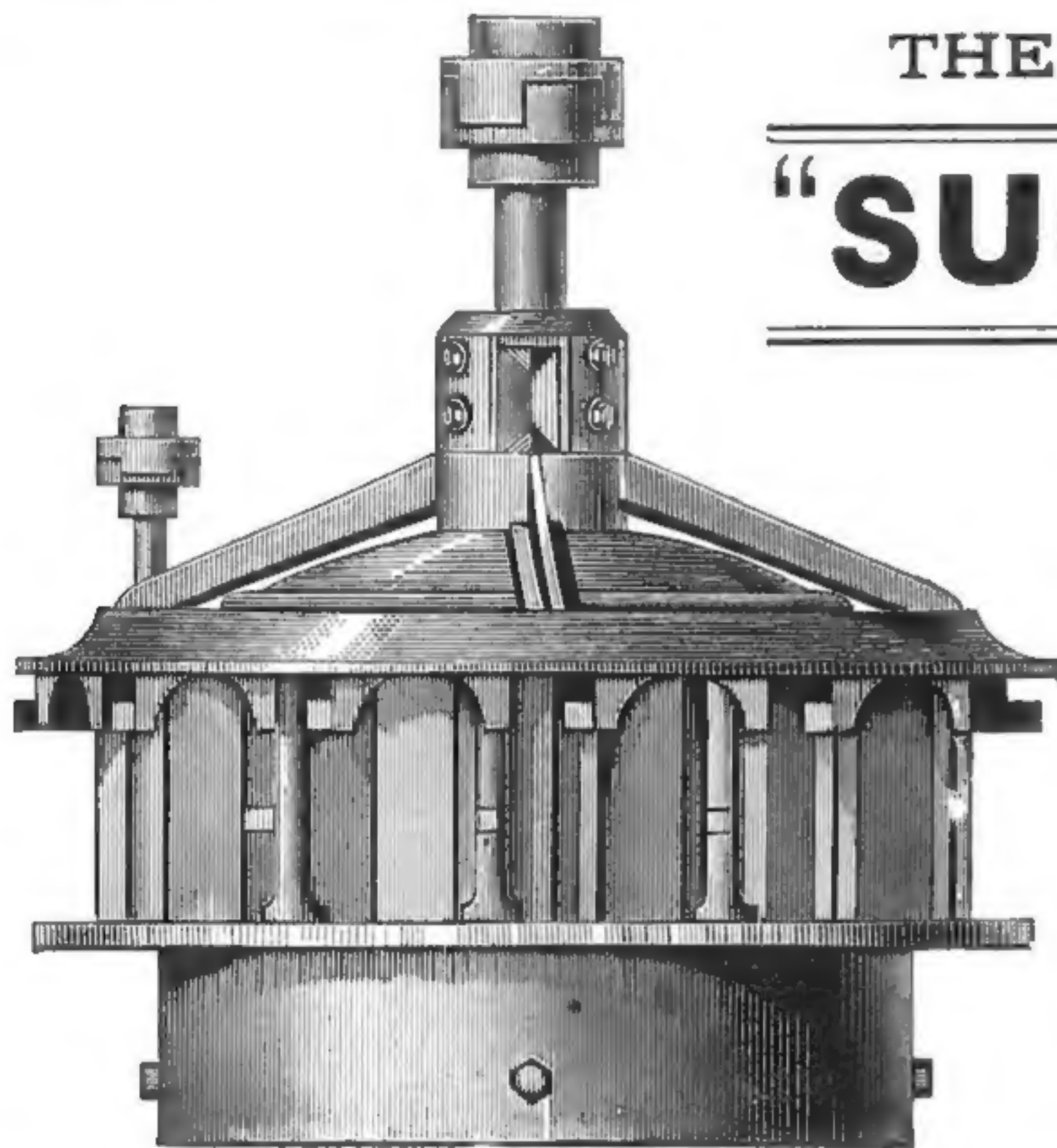
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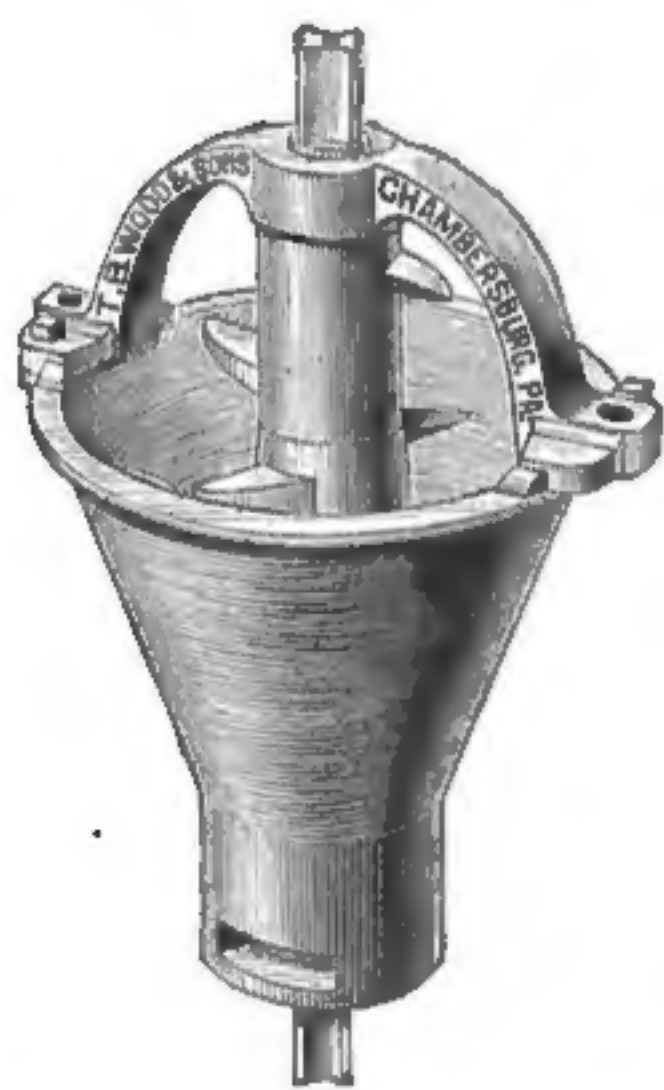
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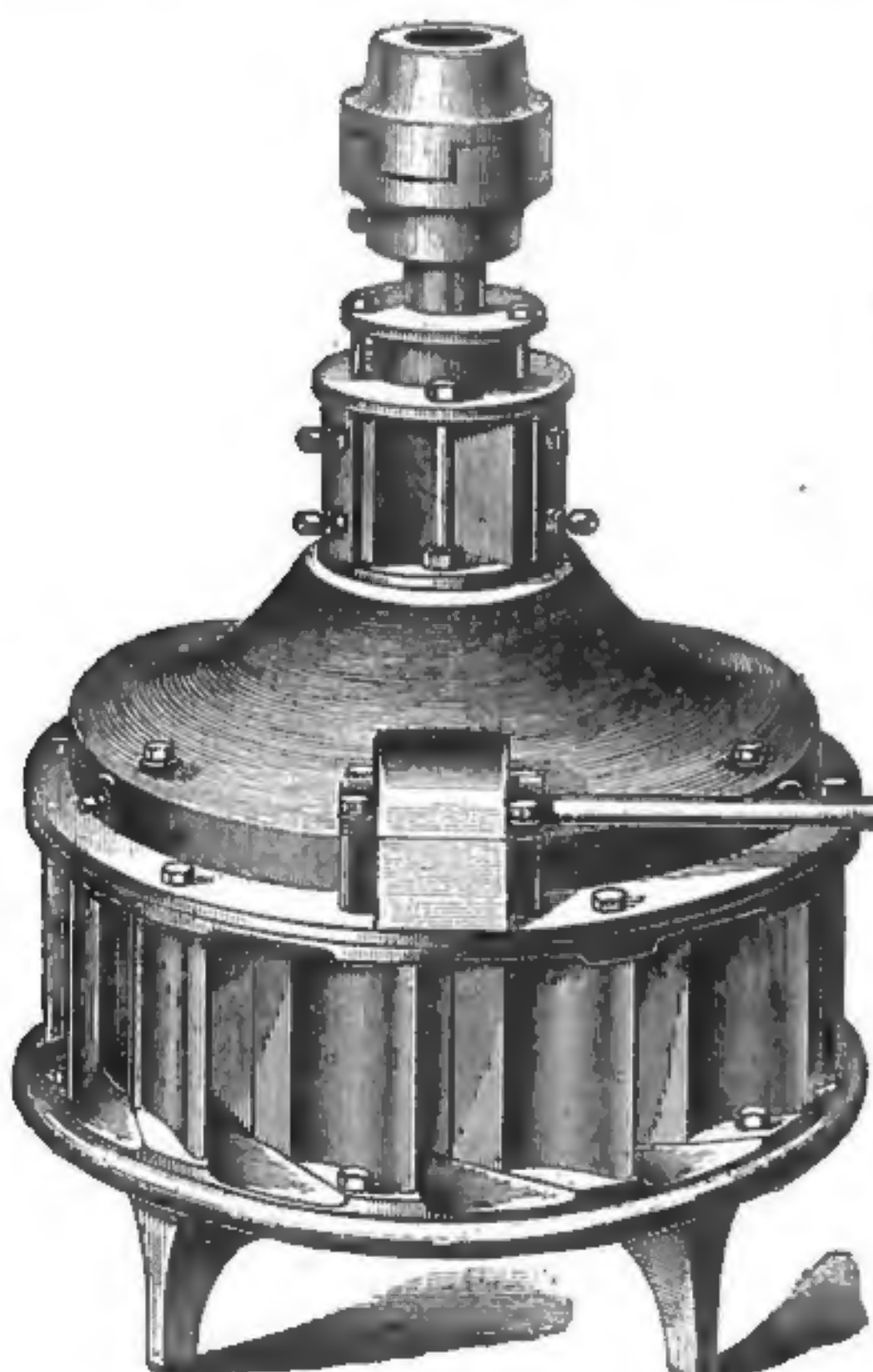


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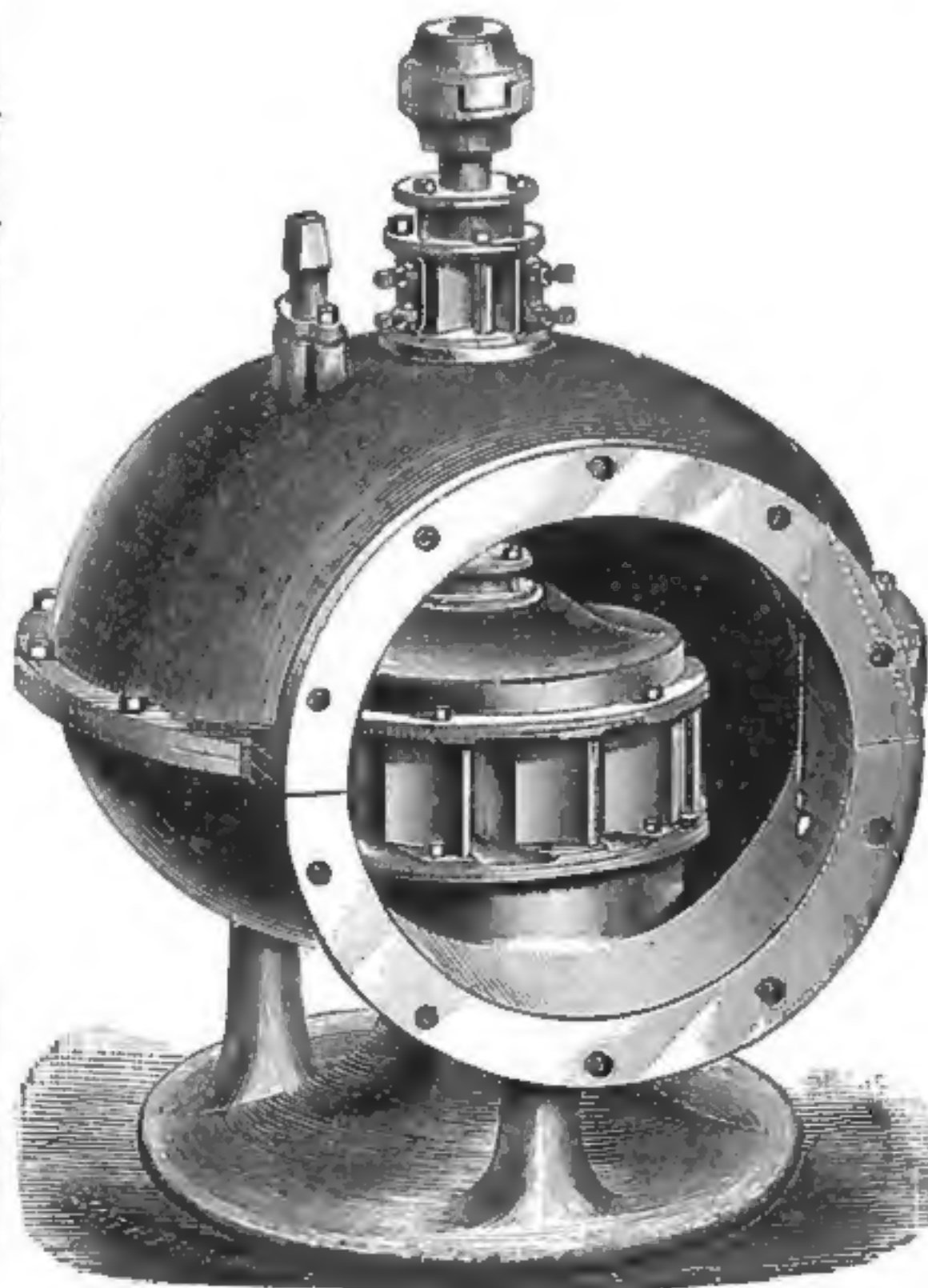
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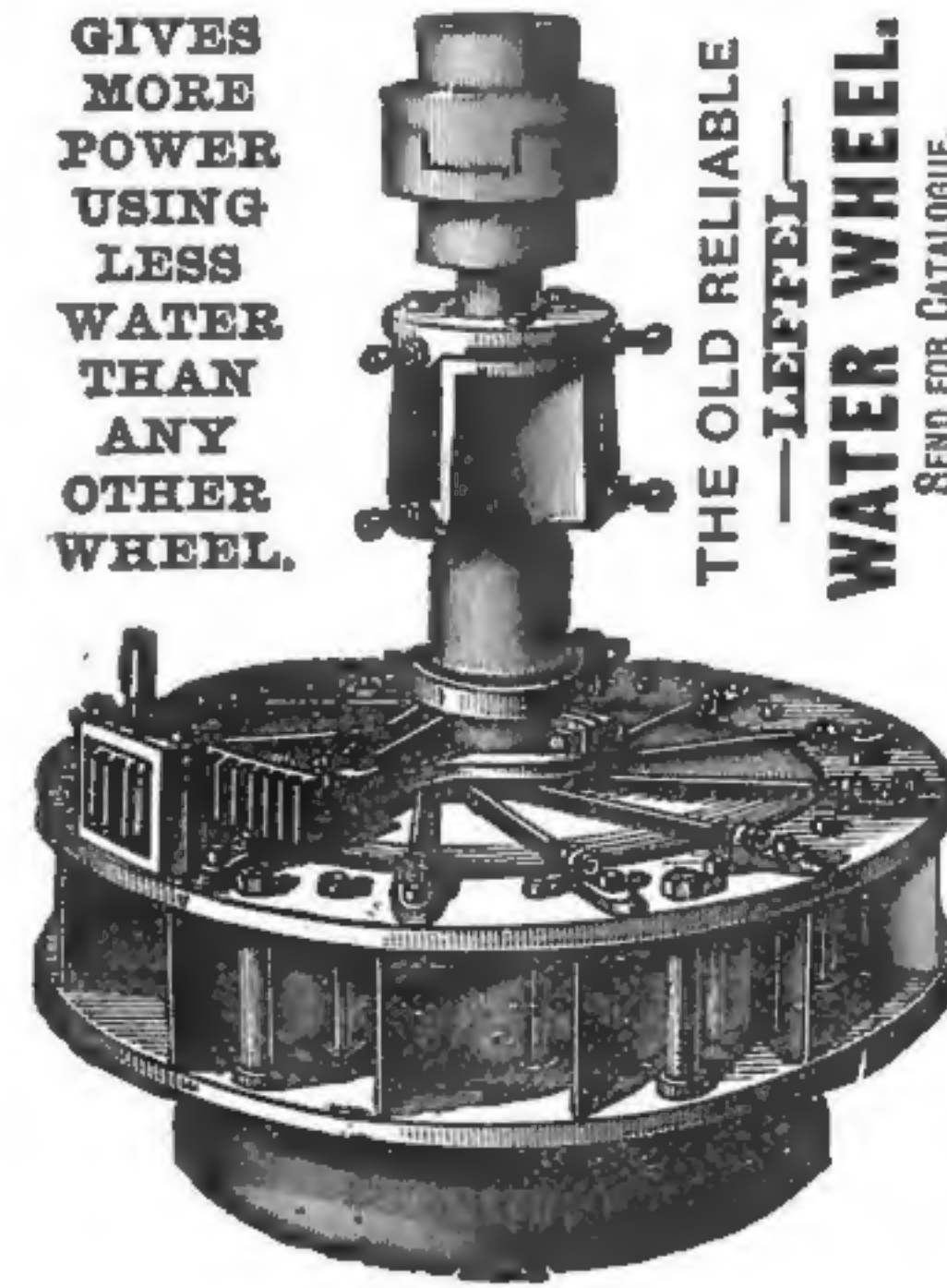
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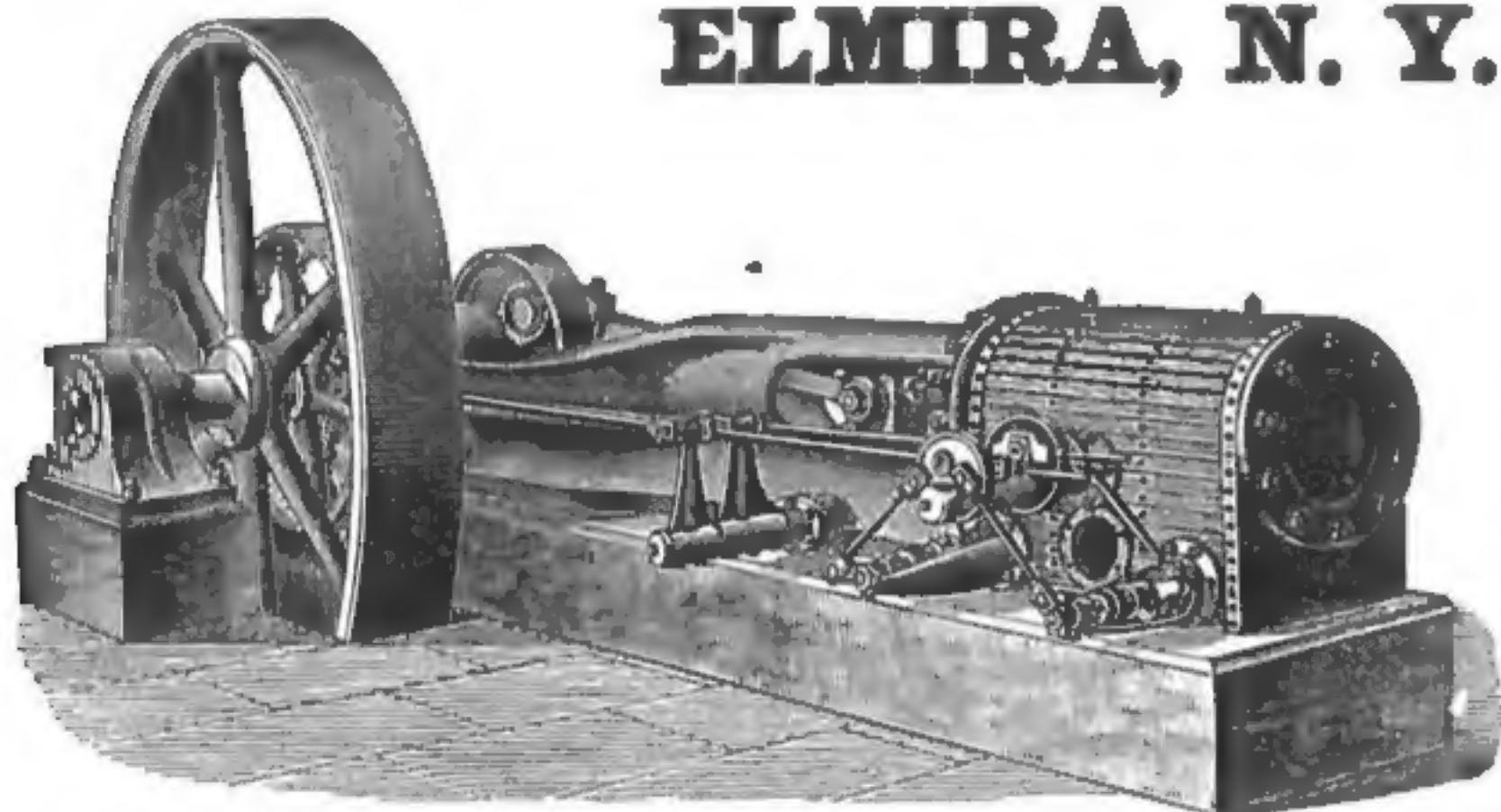
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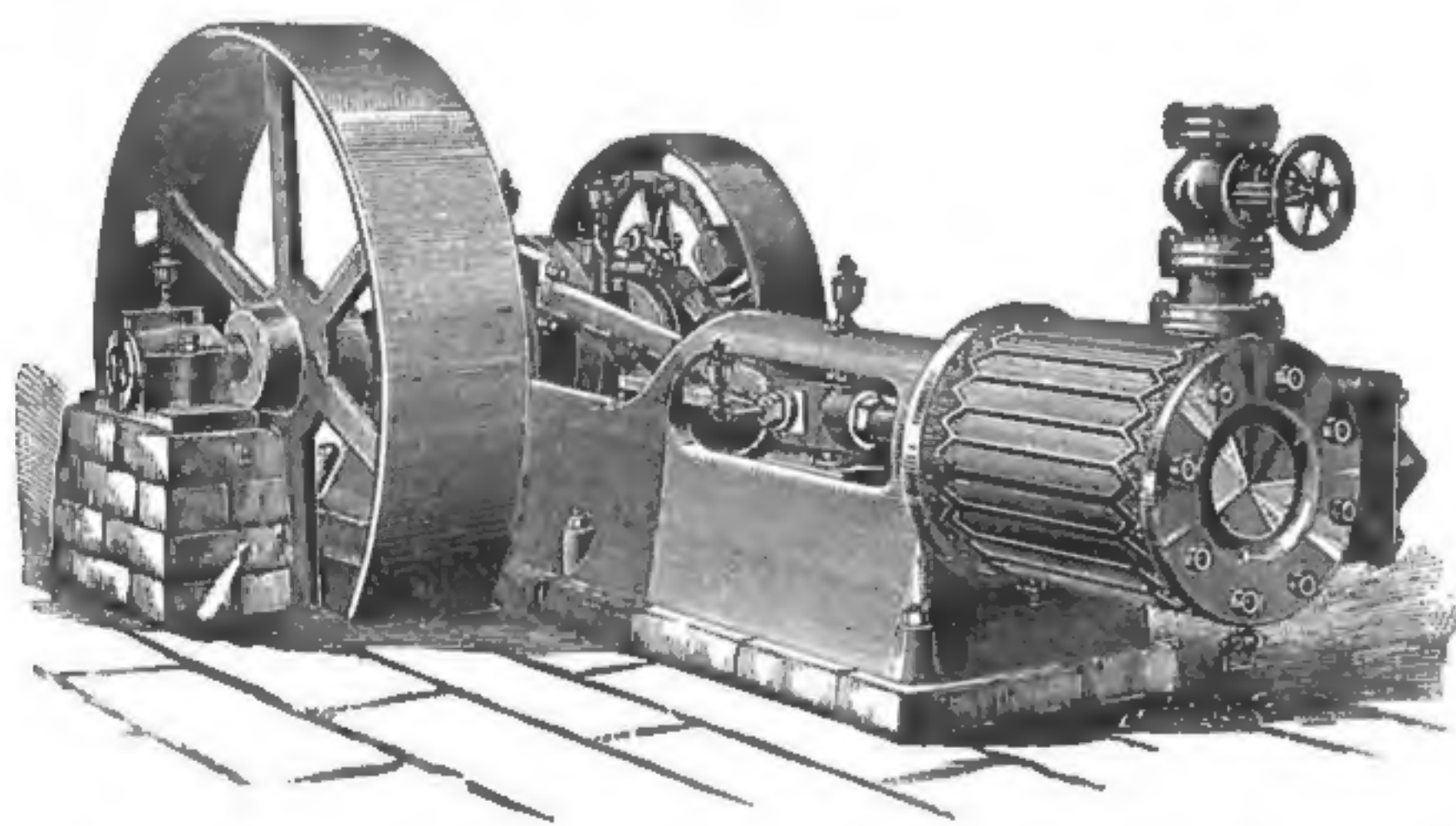


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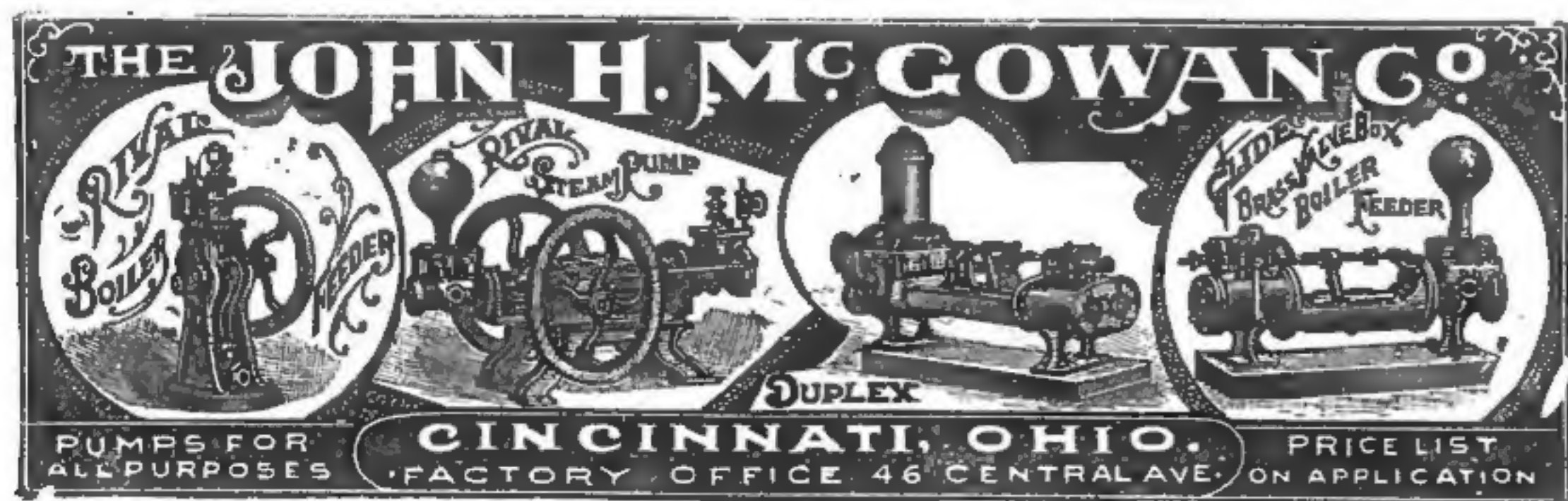


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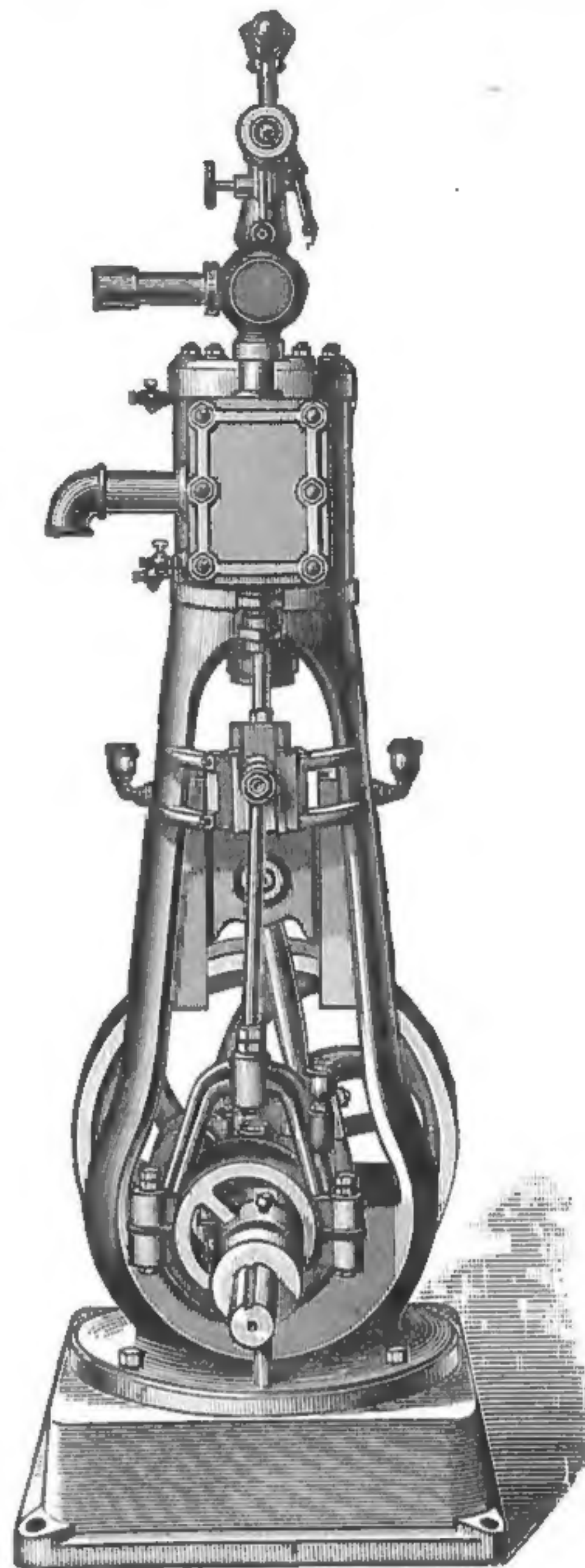
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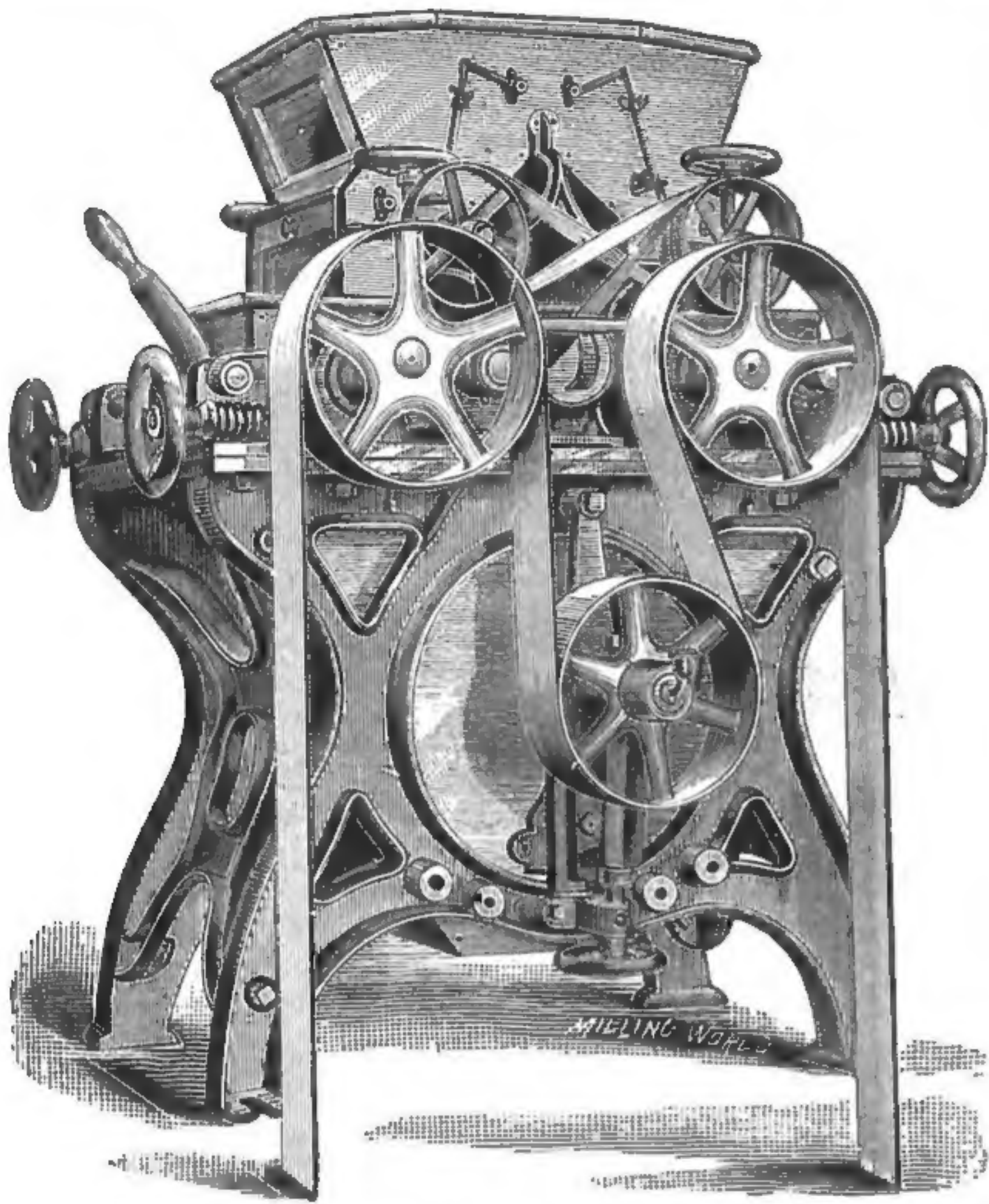
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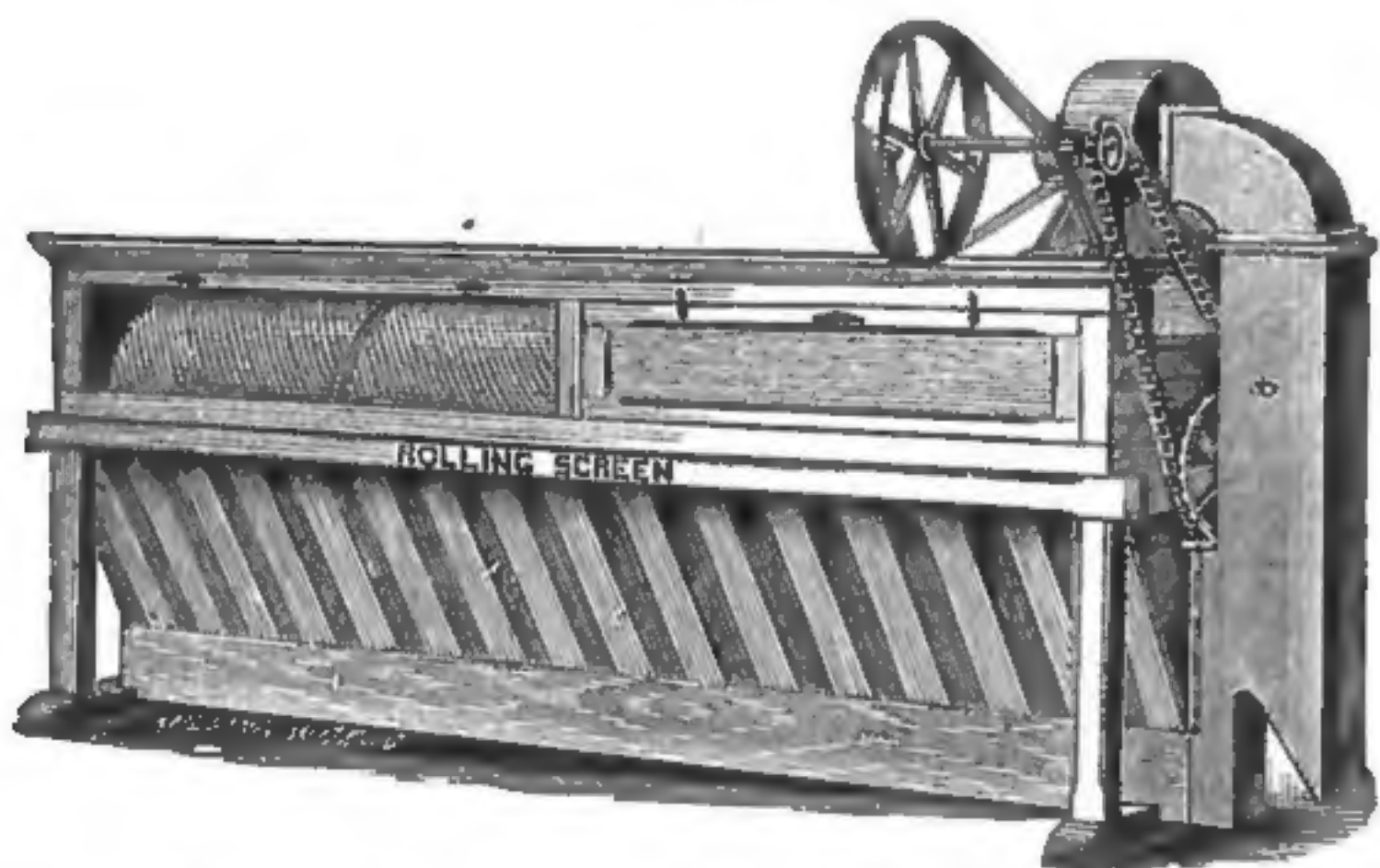
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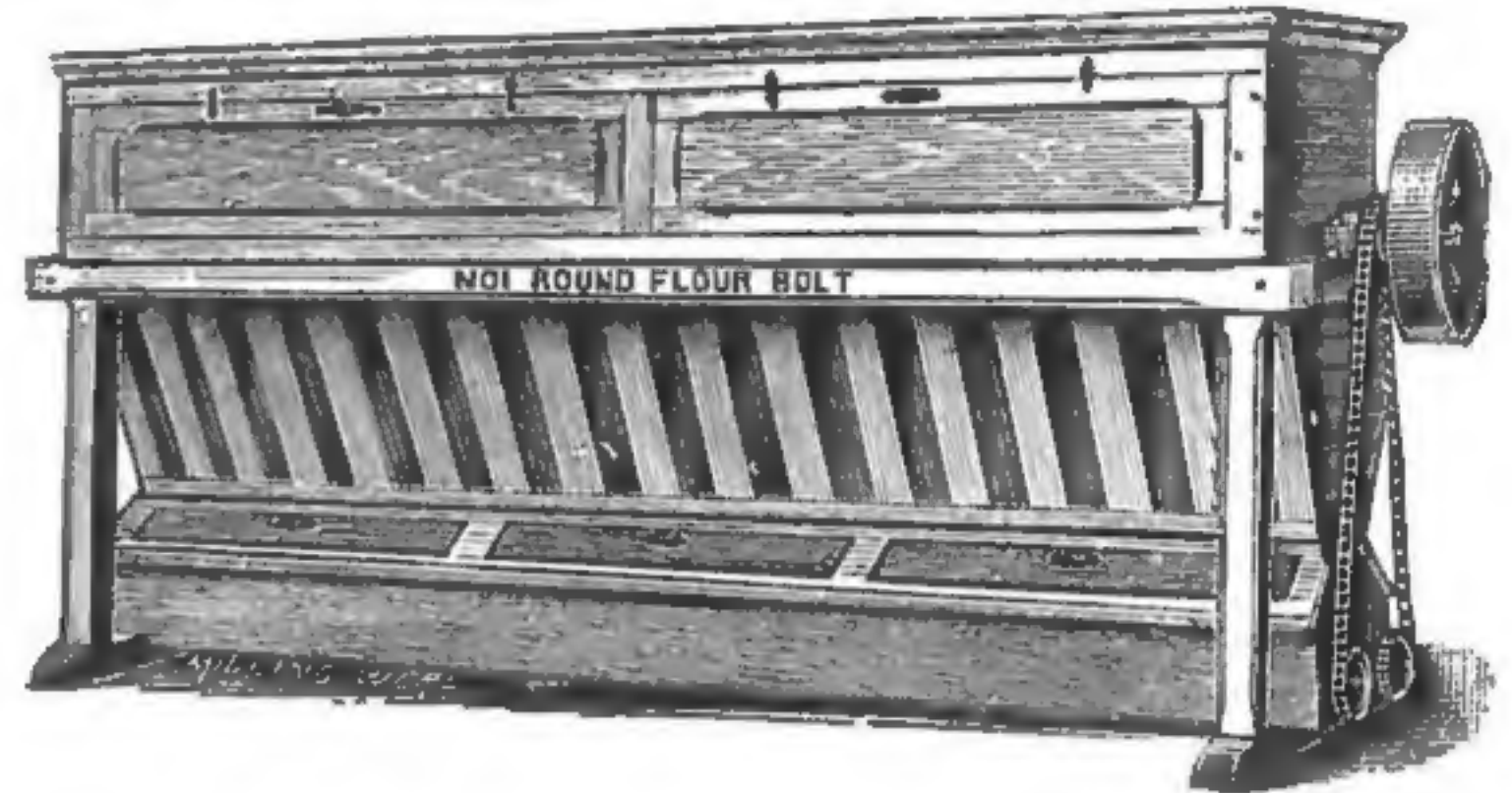
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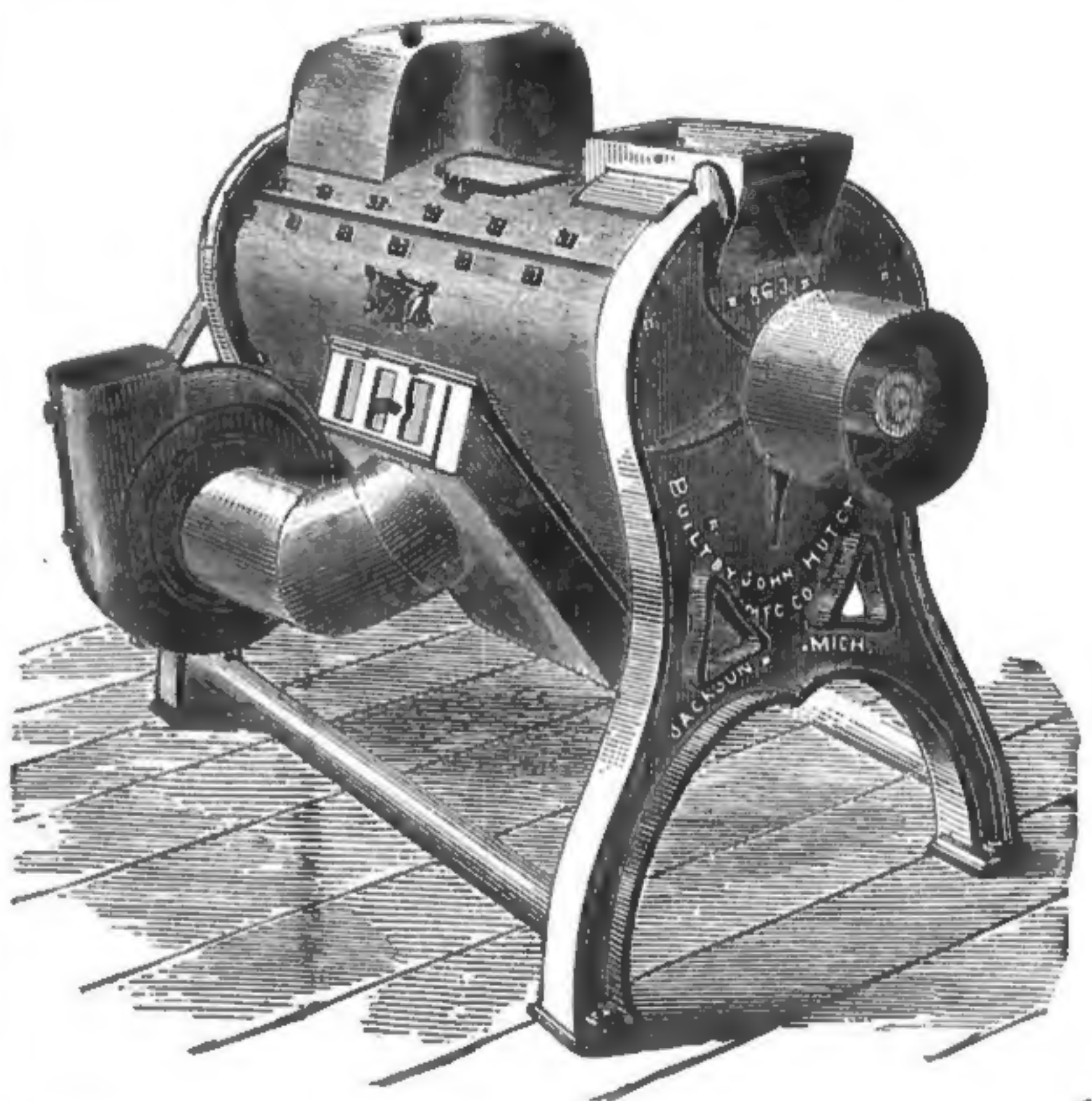


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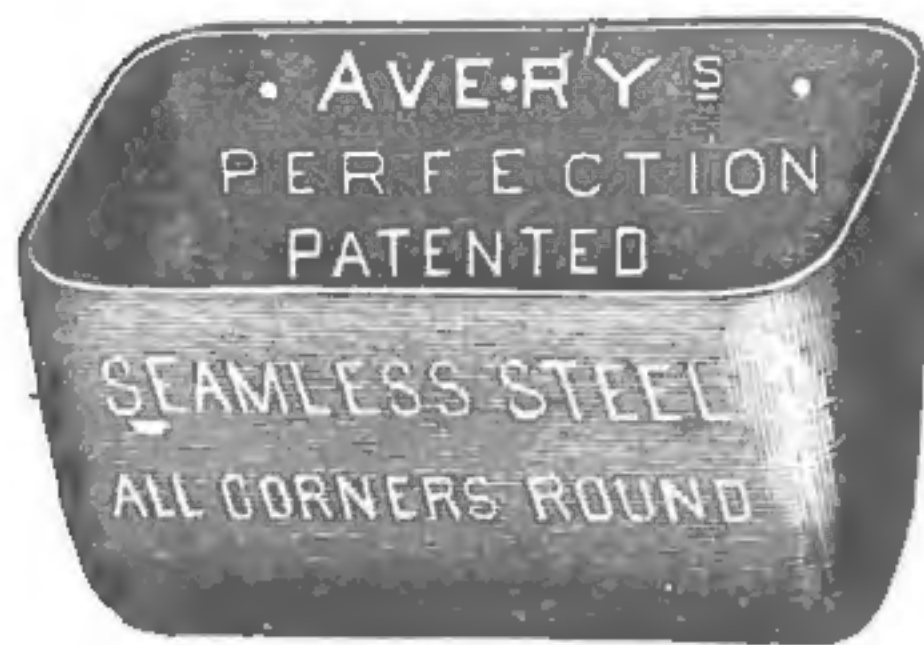


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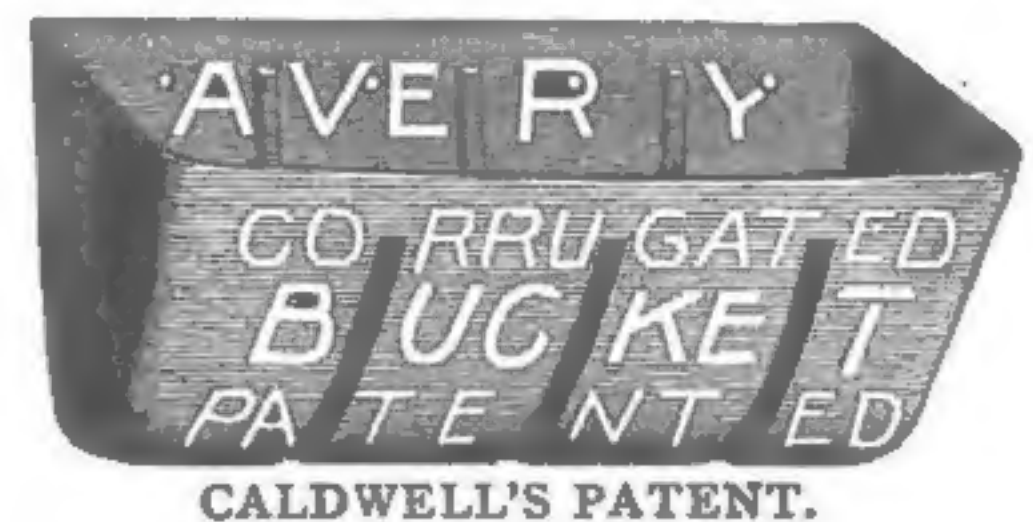
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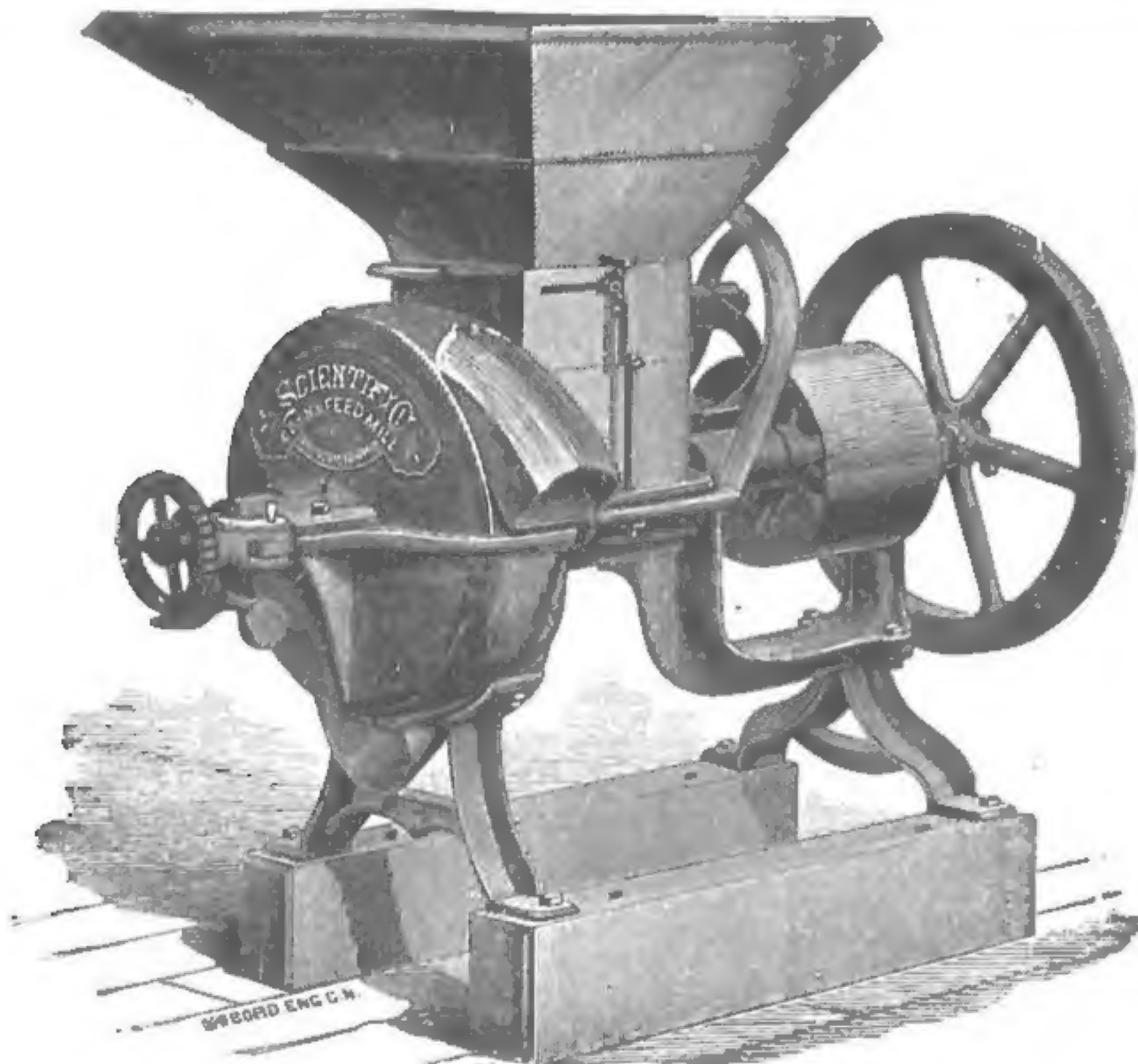
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